

Evaluation of ACON's Substance Support Service

Author:

Lea, Toby; Brener, L; Whitlam, G; Gray, R; Lambert, S; Holt, M

Publication details:

Commissioning Body: NSW Ministry of Health

Publication Date:

2020-02

Publisher DOI:

https://doi.org/10.26190/5e4b55b5bd827

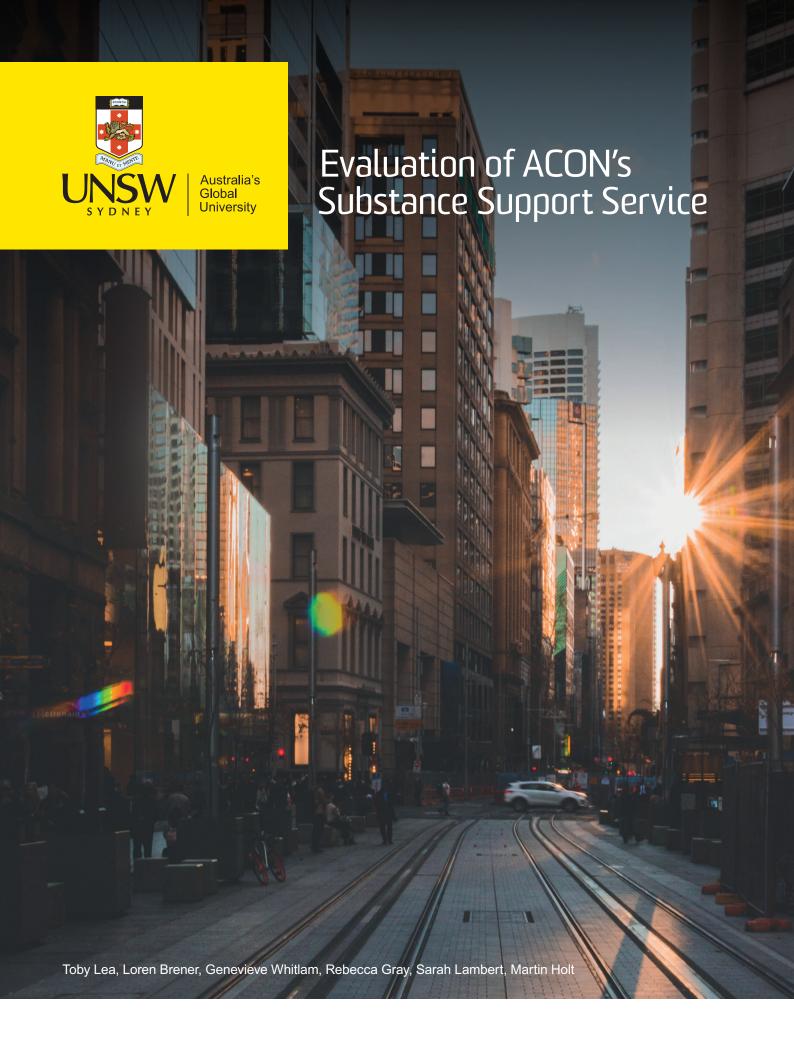
DOI:

https://doi.org/10.26190/5e4b55b5bd827

License:

https://creativecommons.org/licenses/by-nc-nd/4.0/ Link to license to see what you are allowed to do with this resource.

Downloaded from http://hdl.handle.net/1959.4/unsworks_64086 in https://unsworks.unsw.edu.au on 2024-04-30







Research Team

Toby Lea¹ Loren Brener¹ Genevieve Whitlam² Rebecca Gray¹ Sarah Lambert² Martin Holt¹

- 1 UNSW Centre for Social Research in Health
- 2 ACON, Sydney

Centre for Social Research in Health

UNSW Sydney NSW 2052 Australia T +61 2 9385 6776 F +61 2 9385 6455 E csrh@unsw.edu.au W https://www.arts.unsw.edu.au/csrh

© UNSW Sydney 2020

Suggested citation:

Lea, T., Brener, L., Whitlam, G., Gray, R., Lambert, S., & Holt, M. (2020). *Evaluation of ACON's Substance Support Service*. Sydney: UNSW Centre for Social Research in Health and ACON http://doi.org/10.26190/5e4b55b5bd827.

Acknowledgments

This evaluation was funded by an Alcohol and other Drugs NGO Evaluation Grant from the NSW Ministry of Health's Alcohol and Other Drugs Early Intervention Fund. We would also like to thank Central Eastern Sydney Primary Health Network for their financial contribution to this project. We would like to thank Shannon Wright and Johann Kolstee, formerly of ACON, for their support in securing funding for this project. We would also like to thank Dr Suzie Hudson and Robert Stirling from the Network of Alcohol and other Drug Agencies (NADA) for supporting our funding application, providing the quantitative data and technical support as well as feedback on the final report. Thank you to Tommy Walker from ACON for conducting many of the interviews, and Dr Kris Rogers from the George Institute for Global Health for his statistical advice. We are also grateful to the project advisory group who provided advice and guidance on the study. Finally, we would like to thank the clients, ACON staff and other health professionals who generously offered their time to be interviewed.

Contents

ACKNOWLEDGMENTS	I
LIST OF TABLES	Ш
LIST OF FIGURES	IV
EXECUTIVE SUMMARY	1
EVALUATION AIMS AND DESIGN	3
Research questions	3
Study design	3
PROGRAM OVERVIEW	5
Description of ACON's Substance Support Service model	5
BACKGROUND	7
QUANTITATIVE FINDINGS	9
Methods	9
Sample	9
Data collection and measures	10
Statistical analyses	11
Baseline characteristics	13
Sample description	13
Treatment referral and cessation	17
Principal drug of concern	20
Baseline substance use and psychosocial function	21
Injecting drug use	23
Treatment outcomes among ACON clients	24
Use of principal drug of concern	24
Other substance use outcomes	27
Psychosocial outcomes	28
Gender differences at treatment entry	30
Sample characteristics by treatment retention and reduced substance use	30
Discussion	33
Conclusions	36

QUALITATIVE	E FINDINGS	37
Methods		37
Client into	erviews	39
Partici	ipant profile	39
Client	journeys to support	40
Servic	ce experiences	43
	ipants' broader experiences of LGBTI and effects on help-seeking	47
Impro people	ving AOD services for LGBTI e	51
Discus	ssion	52
Profession	onal stakeholder interviews	53
Partici	ipant profiles	53
	and stakeholder accounts of I's Substance Support Service	53
	ptions and experiences of I's Substance Support Service	54
	ance use and service needs 3TI people	55
	outcomes and impacts of I's Substance Support Service	56
	nolder suggestions for service vement	57
Discus	ssion	58
COST ANALY	/SIS	60
Costs		60
Outputs		61
Costs per	r output	61
Projected	I costs and outputs	61
Discussion	วท	62
CONCLUSIO	N AND RECOMMENDATIONS	64
REFERENCE	S	66

List of tables

Table 1.	Comparison of sample characteristics of ACON and mainstream clients at treatment commencement	16
Table 2.	Gender and sexual identity of ACON clients	17
Table 3.	Source of referral into treatment	18
Table 4.	Reasons for cessation of treatment	18
Table 5.	Reasons for cessation of treatment among ACON clients with methamphetamine or alcohol as principal drug of concern	19
Table 6.	Principal drug of concern among ACON clients at treatment commencement	20
Table 7.	Substance use and psychosocial function at treatment commencement	22
Table 8.	Injecting drug use at treatment commencement	23
Table 9.	Change in use of principal drug of concern during treatment among ACON clients, and by clients with methamphetamine and alcohol as principal drugs of concern	26
Table 10.	Change in psychosocial outcomes during treatment among ACON clients, and by clients with methamphetamine and alcohol as principal drugs of concern	29
Table 11.	Comparison of substance use and psychosocial outcomes at treatment entry among ACON clients by gender	30
Table 12.	Baseline characteristics of ACON clients according to number of sessions attended	31
Table 13.	Baseline sample characteristics of ACON clients associated with abstinence or at least 50% reduction in days of use of principal drug of concern since baseline at last completed progress interview	32
Table 14.	Characteristics of client interview participants	39
Table 15.	Method of calculating additional costs to ACON in 2018-19	60
Table 16.	Costs to ACON per output for the Substance Support Service	61
Table 17.	Projected costs to ACON in 2019-20	62

List of figures

Figure 1.	Propensity score matching for ACON and mainstream services on days of use of principal drug of concern	12
Figure 2.	Included participants, attrition at each progress interview, and attrition according to different time periods within 12 months of treatment commencement	14
Figure 3.	Reasons for cessation of treatment among ACON clients by completed counselling sessions	19
Figure 4.	Principal drug of concern at treatment commencement, comparing clients of ACON and mainstream services	21
Figure 5.	Median days of alcohol use and heavy alcohol use among ACON clients with alcohol as principal drug of concern	25
Figure 6.	Use of substances other than the principal drug of concern in the previous four weeks among ACON clients	27
Figure 7.	Injecting drug use and sharing of injecting equipment in previous 3 months among clients with methamphetamine as principal drug of concern	28

Executive Summary

This project was a mixed methods evaluation of ACON's Substance Support Service, an outpatient, alcohol and other drug (AOD) counselling service for lesbian, gay, bisexual, transgender and intersex (LGBTI) people, with clinics in Sydney, Newcastle and Lismore. The service is one of the few AOD services in Australia that is specifically tailored for LGBTI people (known as a LGBTI-specific service).

The evaluation included three components: (i) a retrospective quantitative analysis of treatment and related outcomes among clients attending the service; (ii) in-depth interviews with clients of ACON and mainstream AOD services, ACON staff and key external stakeholders; and (iii) a cost analysis.

The treatment outcomes analysis included clients of ACON's Substance Support Service (n=284) and clients of mainstream AOD counselling services (n=1,011) who commenced treatment between January 2016 to December 2018. The mean age of ACON clients was 38 years; the majority were gay and bisexual men (79%); the most common drugs of concern were methamphetamine (58%) and alcohol (26%), and the median duration of treatment was 112 days. Despite the services having similar treatment philosophies and modalities, comparison of the characteristics of ACON and mainstream clients at treatment entry showed that the client profiles were very different in terms of employment and housing, principal drug of concern, recent substance use, and source of referral into treatment. In addition, only six mainstream clients identified as LGBTI. For these reasons, treatment outcomes could not be compared between ACON and mainstream services. For ACON clients, the proportion reporting abstinence increased from 14% at treatment entry to 28% at the fourth counselling session and 39% at the 12th session. The median number of days that the principal drug of concern was used in the previous four weeks reduced from eight days to four days at session four and five days at session 12. Clients also reported reductions in psychological distress and improvements in perceived quality of life between treatment entry and at each assessment during treatment (conducted every fourth counselling session).

Interviews were conducted with 22 current and former clients of ACON's Substance Support Service, 12 LGBTI clients of mainstream AOD services, 6 ACON staff, and 12 professionals from other AOD and related services (e.g. clinicians, managers). Clients who had accessed ACON's Substance Support Service were generally very satisfied with the service, and were motivated to access a tailored service because they felt it would be more likely meet their needs, including having clinicians that understood LGBTI issues related to AOD use. For some mainstream clients, their main imperative in choosing a service was gaining access to AOD treatment, and a focus on their LGBTI identity was less important, although they appreciated services that provided culturally appropriate care. While client satisfaction with mainstream services was generally good, some interviewees reported that they would like to see more visual signifiers that mainstream services were LGBTI-inclusive and that staff were knowledgable of AOD issues specific to LGBTI people.

Health professionals who were interviewed agreed that the availability of tailored AOD services was beneficial for LGBTI people. Interviewees also saw the value of providing AOD support for LGBTI clients at mainstream services, as long as those services were equipped to provide culturally appropriate care for LGBTI people. This could be achieved by services participating in LGBTI inclusivity training, for which AOD-specific training is available. While external professionals' perceptions of ACON were generally very positive, some thought that the Substance Support Service was not well known by clinicians at mainstream services. However, many services who regularly refer to ACON's service are government facilities, and these clinicians could not participate in the study due to the impracticality of gaining ethical approval in a timely fashion from each individual health service.

A consistent finding in the literature is that LGBTI people report a higher prevalence of substance use disorders than non-LGBTI people, and there are differences in the patterns, contexts and motivations for substance use. LGBTI-specific services play an important role in understanding and responding to the health needs of these communities and in reducing barriers to accessing services. LGBTI people also access AOD services at mainstream services as well as through general practitioners and private psychotherapists, and mainstream services should be adequately skilled and knowledgable to provide culturally appropriate services for their LGBTI clients.

Promotional activities to increase awareness of ACON's service among both potential clients in the community and referring health professionals would require increased funding for the service. The cost analysis we conducted showed that ACON is operating at capacity in the metropolitan Sydney region and is covering a shortfall in government funding from internal sources. Increasing client capacity would require more resources. AOD services in general are struggling to meet demand, and it was recently estimated that an additional \$1 billion annually would need to be invested nationally to address unmet AOD treatment needs.

¹ St Vincent's Health Australia. (2019). Reform of the alcohol and other drugs treatment sector: Australian Government Pre-Budget Submission 2019-2020. Sydney: St Vincent's Health Australia.

Evaluation Aims and Design

This project was an evaluation of ACON's Substance Support Service, an outpatient counselling service for lesbian, gay, bisexual, transgender, intersex (LGBTI) and other sexually and gender diverse people, and those affected by HIV, experiencing problems with alcohol and other drug (AOD) use. The service is one of the few AOD services in Australia that is specifically designed for LGBTI people (known as a LGBTI-specific service). This evaluation was a collaboration between ACON, the Centre for Social Research in Health (CSRH) at UNSW Sydney, and the Network of Alcohol and other Drugs Agencies (NADA).

The evaluation aimed to examine treatment outcomes among clients attending ACON's Substance Support Service, and compare the baseline characteristics and treatment outcomes (where possible) with clients of comparable mainstream services. The evaluation also included in-depth interviews with clients, staff and external stakeholders that aimed to gain detailed insights into experiences of the service, its benefits and limitations, and how AOD services for LGBTI people could be improved.

Research questions

- Do clients of ACON's Substance Support Service experience reductions in substance use and improved
 psychosocial wellbeing following participation in treatment? How do the baseline characteristics and
 treatment outcomes of ACON clients compare with those of clients at non-government, outpatient AOD
 counselling services for the general community (hereafter "mainstream services")?
- 2. To what extent does ACON's Substance Support Service meet clients' needs and expectations, and how satisfied are clients with the service received? Do LGBTI clients at mainstream services have similar or different experiences?
- 3. How successful has the service been in reaching different groups in need of assistance within the target population (e.g. gay and bisexual men, lesbian and bisexual women, trans and gender diverse people)?
- 4. What do ACON clients, staff and external stakeholders consider to be the benefits and limitations of the service, as compared to the perspectives of LGBTI clients at mainstream services? How could ACON's service delivery be improved?

Study design

This was a mixed methods process and outcomes evaluation which included three components: quantitative analysis of treatment outcomes; in-depth interviews with clients, staff and key stakeholders; and a cost analysis.

The quantitative phase was a retrospective analysis of non-identifiable client records to examine the sociodemographic characteristics, drugs of concern, psychosocial wellbeing and substance use outcomes of clients who commenced treatment at ACON's Substance Support Service between January 2016 and December 2018. In addition, cross-service comparisons were made between ACON clients (n=284) and clients of non-government, outpatient, alcohol and other drug counselling services in the greater Sydney region (n=1,011).

The qualitative phase included in-depth interviews with (i) current and former clients of the Substance Support Service (n=22), (ii) LGBTI clients attending mainstream AOD counselling services (n=12), and (iii) ACON staff and key stakeholders (n=18). This phase of the research explored LGBTI people's experiences of

and satisfaction with AOD treatment at ACON's Substance Support Service and at mainstream services. In addition, interviews explored client, staff and key stakeholder perspectives.

The cost analysis is focused on ACON's Substance Support Service provided in Sydney. The analysis was requested by the New South Wales Ministry of Health as a supplement to the main evaluation, and represents the total cost of the service to the federal government for the 2018-19 financial year.

The evaluation received ethical approval from the Human Research Ethics Committee of UNSW Sydney (Ref. HC17715) and the ACON Research Ethics Review Committee (Ref. 2017/26).

Program Overview

ACON's Substance Support Service provides individual, outpatient counselling to LGBTI people and people living with HIV in New South Wales (NSW) who are experiencing problems with substance use. It also provides support to partners, friends and families, as well as inclusivity training for mainstream AOD services. The service is provided at ACON's Sydney, Lismore and Newcastle offices and is one of the few AOD services in Australia that is specifically tailored to the needs of LGBTI people. The service is free for clients and is funded:

- by the Commonwealth Department of Health through its non-government organisation (NGO) Treatment Grants Program to provide face-to-face support in Lismore and Newcastle, and online and phone support for hard-to-reach clients, such as those living in other NSW regional and remote areas
- directly by Primary Health Networks (PHNs) under the National Ice Action Strategy in two Sydney PHN regions, with additional support from ACON funds.

The Substance Support Service aims to reduce the impacts and associated harms of problematic substance use in LGBTI communities, and ensure that clients can achieve safety and stability with their substance use. The service recognises the historical and cultural barriers to good physical and mental health experienced by LGBTI people, and provides treatment within a harm reduction, person-centred framework (typically up to 12 sessions). Counsellors draw upon a range of evidence-based therapeutic modalities, including acceptance and commitment therapy, cognitive behavioural therapy and motivational interviewing, depending on clients' treatment goals.

Description of ACON's Substance Support Service model

The model:

- provides up to 12 individual sessions on identified goals, with clients able to re-enter treatment as required
- utilises a harm reduction and stages of change approach, with counsellors adopting multiple modalities, including motivational interviewing, acceptance and commitment therapy, cognitive behavioural therapy and solution-focused brief therapy
- operates in a stepped-care model, offering brief intervention, tapering of support in preparation for discharge and the ability to work in parallel with care coordination services delivered either by ACON's care coordination team or specialist Local Health District (LHD) / PHN mental health or AOD services
- develops natural support networks and links with relevant health and community services
- is available via face-to-face, phone or online videoconferencing
- provides treatment frequency and intensity of support that is individualised according to clients' needs and stage
- provides an opportunity for clients to re-enter the service and receive support for lapse and relapse prevention.

The service can be delivered as a stand-alone intervention or as a complement to detoxification services, residential rehabilitation and opioid treatment programs or aftercare for these programs. Clients of the service are supported to access detoxification and residential rehabilitation as required and are followed up in preparation to leaving as part of a transition plan.

ACON operates a centralised intake fielding inquiries and referrals from clients via phone, in person, in ACON offices and online, for streamlined and time sensitive allocation to a range of services. An Intake Officer follows up inquiries within two working days and on the same day where priority needs are flagged (e.g. recent HIV diagnosis, emotional distress, domestic and family violence). Clients are contacted by a counsellor and offered an appointment within a week.

ACON does not operate a waiting list beyond two weeks out of duty of care as this is considered unhelpful for clients' mental health and wellbeing. It is very rare such a wait occurs as counsellors manage their caseload, including tapering sessions with clients as they meet their goals and transition into exit planning. If clients are assessed as being able to wait, brief interventions are provided by a counsellor, ensuring continuity of care. These typically involve phone check-ins and the development of safety and self-care plans with harm reduction strategies.

On the commencement of treatment, clients undergo a comprehensive biopsychosocial assessment, including standardised tools. This includes the New South Wales Minimum Data Set for Drug and Alcohol Treatment Services (NSW MDS DATS) and NADA's Client Outcomes Management System (COMS). These are readministered every four counselling sessions to monitor progress and inform treatment goals and strategies, with counsellors providing feedback to clients. Clients are referred to external health and community services if another specialised service is needed or will complement counselling. This can be done via cold referrals (where the client contacts a service independently) or warm referrals (where the counsellor facilitates contact), depending on the complexity of a client's needs.

The twelve sessions typically start weekly, stepping down to fortnightly and finally monthly prior to exiting, with the ability to re-enter treatment if needed. Sessions are supplemented with brief interventions and follow-up, including via phone or SMS, either prior to the first appointment, or as required if clients are experiencing triggers or stressors. This approach recognises that some people will access support periodically as their situations, readiness for change and goals evolve over time.

Clients of the Substance Support Service requiring additional psychosocial support are linked with ACON's Care Coordination team and benefit from their extensive referral pathways, including health services, housing, Centrelink, financial and legal services. It is not uncommon for clients to be without a regular general practitioner (GP). Counsellors work with clients to refer to LGBTI-inclusive GPs, including practices that have specialist HIV prescribers. With client permission, counsellors can provide regular feedback to GPs, provide the client with outcome measure (COMS) progress reports and also liaise in the development of care plans and discharge preparations.

Background

LGBTI people report disproportionately higher rates of AOD use and harms compared to non-LGBTI people (Roxburgh, Lea, de Wit, & Degenhardt, 2016), and have been identified as a priority population for research and intervention in the *National Drug Strategy 2017-2026* (Australian Government Department of Health, 2017). This is often understood to be a consequence of stigma and discrimination towards sexual and gender minorities, as well as the normalisation and cultural significance of AOD use in LGBTI social networks (Lea, Reynolds, & de Wit, 2013; Meyer, 2003). Despite improvements in social attitudes towards sexual and gender minorities in recent years, problems with AOD use continue to be a challenge for LGBTI communities, and best practice approaches to AOD treatment among LGBTI people are not well understood (Ritter, Matthew-Simmons, & Carragher, 2012). In Australia, there has been little research on AOD treatment among LGBTI people (Ritter et al., 2012). Questions on sexual and gender minority status are not part of minimum data routinely collected by mainstream AOD services across Australia although from 2016, NADA has included optional questions about gender and sexual identity for client outcomes reporting by non-government AOD services in NSW. In addition, services tailored for LGBTI people have rarely been evaluated, so it is unclear whether the needs of these communities are being met by current services (Australian Institute of Health and Welfare, 2018a; Brener et al., 2018; Lea et al., 2017).

In the 2016 Australian National Drug Strategy Household Survey, the prevalence of illicit drug use in the past 12 months was more than twice as common among LGB than heterosexual people (42% vs. 15%), and LGB people were also more likely to report risky alcohol use at least once a month (42% vs. 26%; defined as four or more drinks on one occasion) (Australian Institute of Health and Welfare, 2017). Findings about treatment access from the 2016 survey have yet to be published. However, in the 2013 survey, gay and bisexual men were twice as likely to have ever attended alcohol and other drug treatment compared to heterosexual men (12% vs 6%), while lesbian and bisexual women were more than twice as likely to have attended treatment than heterosexual women (15% vs. 6%) (Roxburgh et al., 2016). High rates of substance use among LGB people have been found in community surveys of lesbian, bisexual and queer women in Sydney (Mooney-Somers, Deacon, Scott, Price, & Parkhill, 2019) and gay and bisexual men across Australia (Broady et al., 2018; T. Lea et al., 2013). In the Gay Community Periodic Surveys, higher rates of illicit drug use, injecting drug use and drug use in sexual settings have been reported by HIV-positive men compared to other gay and bisexual men (Lea, Mao, et al., 2016; T. Lea et al., 2013). However, HIV-positive men have been found to be no more likely than other gay and bisexual men to report risky alcohol use (Lea et al., 2015).

There is currently limited data about substance use and treatment among trans and gender diverse people in Australia. However, in the Australian National Trans Mental Health Study, 42% of transgender men and 26% of transgender women reported any illicit drug use in the previous 12 months (Hyde et al., 2013). In the Private Lives 2 study, a national health survey of LGBTI adults, transgender participants had the highest rates of accessing mental health services in the previous 12 months (60% of transgender men and 67% of transgender women compared to 30% of cisgender men and 45% of cisgender women) (Leonard, Lyons, & Bariola, 2015).

People experiencing problems with substance use are often difficult to engage and retain in treatment due to relapse, polydrug use, comorbid mental health conditions, and perceptions that services are oriented towards people with opioid dependence (Brecht, Greenwell, & Anglin, 2005; Pennay & Lee, 2009). LGBTI people may experience additional barriers to treatment, including concerns about stigma and discrimination from service providers, perceptions that services will have inadequate knowledge of LGBTI people, and fears about privacy and confidentiality (Matheson, Roxburgh, Degenhardt, Howard, & Down, 2010;

Matthews, Lorah, & Fenton, 2006). LGBTI clients may also report higher rates of substance dependence and psychological distress at treatment entry, and poorer treatment outcomes, compared to non-LGBTI clients (Cochran & Cauce, 2006; Flentje, Heck, & Sorensen, 2014). Clinical trials with gay and bisexual men have reported better treatment outcomes from programs that have been culturally tailored to their needs, and many men report a preference for tailored (LGBTI-specific) services (Knight et al., 2019; Senreich, 2010). In Sydney, a survey of LGB people who used methamphetamine reported heterogeneity in treatment preferences (Matheson et al., 2010). While 78% of respondents reported a desire for tailored services and 54% reported a preference for a LGBTI-identifying clinician, 54% also thought that mainstream AOD services understood the needs of LGBTI people.

As a pilot study for the current evaluation, methamphetamine treatment outcomes were examined among 101 gay men attending ACON's Substance Support Service between 2012 and 2014 (Lea et al., 2017). Significant reductions in days of methamphetamine use and dependence were reported, as well as reduced psychological distress and improvements in perceived quality of life. These outcomes suggested that this specialised treatment service was effective in assisting gay men in achieving substance use reduction and improved wellbeing. This study was recently noted in a systematic review as the only research outside of the United States to have evaluated a methamphetamine intervention for gay and bisexual men (Knight et al., 2019).

ACON has a long history of LGBTI community engagement, particularly in responding to the HIV epidemic and stigma and discrimination towards LGBTI people, and more recently in the provision of a dedicated AOD counselling service (Stardust, Kolstee, Joksic, Gray, & Hannan, 2018). Considering the perspectives and expertise of "affected communities" in the formation of drug policies and programs can result in services that are more acceptable and accessible to consumers, and better respond to their needs (Lancaster, Ritter, & Stafford, 2013; Lloyd, 2013). This evaluation responds to the National Drug Strategy's call for more research on AOD interventions for LGBTI people, and the US Institute of Medicine's identification of quality of care and treatment barriers as critical research priorities for LGBTI people (Graham et al., 2011).

Quantitative Findings

This component of the evaluation was a retrospective analysis of client outcomes data for treatment episodes commenced between January 2016 and December 2018. The dataset included clients of ACON's Substance Support Service and clients of five non-government, outpatient AOD counselling services located in Sydney and the greater Sydney region. Data came from the NSW Minimum Data Set for Drug and Alcohol Treatment Services (NSW MDS DATS) and NADA's Client Outcomes Management System (NADAbase COMS).

This component of the evaluation aimed to:

- examine whether LGBTI clients of ACON's Substance Support Service experienced reductions in substance use and improved psychosocial functioning following participation in treatment
- compare the baseline characteristics and treatment outcomes, where possible, of clients of ACON's Substance Support Service with those of clients receiving outpatient counselling for alcohol and other drug use at comparable, mainstream non-government services in NSW.

Methods

Sample

This analysis includes data from clients at ACON's Substance Support Service and comparable non-government, outpatient, alcohol and other drug counselling services in NSW provided for the general community (hereafter "mainstream services"). The study period was January 2016 to December 2018.

The inclusion criteria for mainstream services was the provision of outpatient, specialist alcohol and other drug counselling services in the Greater Sydney region, with a similar treatment philosophy and treatment modalities to ACON's service (see Box 1). Like ACON's Substance Support Service, all NADA member services that provide outpatient counselling are committed to harm reduction and provide individual, client-centred, evidence-based treatment to clients seeking to cease or reduce their AOD use. All of these services adhere to the key treatment principles described in the NSW Non-Government Organisation Alcohol and Other Drugs Treatment Specifications (Ritter & Sotade, 2017).

The shortlist of mainstream services included 17 sites. Of these, six were excluded because they were youth-specific services, and six more were excluded because their treatment population was not comparable with ACON's (e.g. the services were focused on the homeless, crisis counselling and referrals, and community transitions from prison) or they did not routinely collect data on treatment outcomes. This resulted in five mainstream services whose client data was broadly comparable with ACON's.

While ACON's Substance Support Service is located in inner city Sydney, many LGBTI clients travel from a range of locations within the Greater Sydney region to access the service, and some clients travel from outside of Sydney. There are currently no LGBTI-specific AOD services located outside of the inner city. For these reasons, the NADA member services that were included in this study were not limited to those located in inner-city Sydney, and included those within the Greater Sydney region.

Box 1. Treatment philosophy and modalities of mainstream services comparable to ACON

- Provide free, individual, outpatient counselling services (including assessment, care plan, counselling and discharge plan).
- Operate within a harm reduction framework providing evidence-based, person-centred services.
- Have qualified counselling staff (e.g. psychologists, counsellors, social workers) with or without formal qualifications in alcohol and other drug counselling.
- Provide services to clients aged over 18 years presenting with alcohol and other drug use as their primary issue of concern.
- Located within the greater Sydney region.
- Collect data on sexual identity and treatment outcomes.

Client eligibility

Eligible clients at each service commenced treatment between January 2016 and December 2018, were aged at least 18 years of age and were seeking support for their own substance use. As ACON is a LGBTI-specific service, clients identify as LGBTI, non-heterosexual or gender diverse. There was no requirement that clients meet criteria for dependence in order to access these services or to be included in the present analysis. At ACON, English language proficiency was a requirement for treatment due to a lack of interpreter services although some clients at mainstream services may have had access to these resources. Only data from clients who had provided informed consent for their records to be analysed and reported in a non-identifiable format for research or evaluation purposes were included in this analysis. In addition, clients were excluded from the dataset when their principal drug of concern was not recorded or they had no baseline data recorded at treatment entry.

Data collection and measures

Data is routinely collected from clients attending non-government alcohol and other drug treatment services in NSW and collated by NADA as part of their NADAbase data management system. This includes: (i) NSW Minimum Data Set for Drug and Alcohol Treatment Services (NSW MDS DATS) which are reported to the NSW Ministry of Health, Australian Government Department of Health, Australian Institute of Health and Welfare (AIHW) and Primary Health Networks; and (ii) NADA Client Outcomes Management System (COMS), which collects additional information at routine points during treatment using standardised instruments to assess client outcomes related to substance use, risk practices and psychosocial wellbeing. These data are entered directly or uploaded to the NADAbase by NADA member services.

NSW MDS DATS is mandated and must be completed by a clinician at treatment intake, monthly during treatment and at treatment cessation. COMS is not mandated and different services collect data from their clients at different times during treatment. Known as "progress interviews", these are typically conducted after a specified number of sessions or elapsed time since commencing treatment. At ACON's Substance Support Service, progress interviews are conducted every fourth counselling session during treatment. The COMS data are self-report survey instruments that can be collected by the clinician, or self-completed by clients.

NSW MDS DATS items include demographic characteristics, client type (own or other's drug use), principal drug of concern and route of administration, service provided, reason for cessation and referral to other services. COMS includes measures of use of different substances in the previous four weeks, the Severity of Dependence Scale (SDS) (Gossop et al., 1995), Kessler Psychological Distress Scale Plus (K10) (Kessler et al., 2002), the European Health Interview Survey Quality of Life index (Schmidt, Mühlan, & Power, 2006), and

items on injecting drug use and sharing of injecting equipment in the previous three months from the Brief Treatment Outcome Measure – Concise (BTOM-C) (Lawrinson, Copeland, & Indig, 2005).

Severity of Dependence Scale. The SDS includes 5 items and the total score ranges from 0-15, with higher scores indicating more severe substance dependence. The SDS has been validated for use with a range of substances, with different cut-off scores indicative of dependence for different substances. Cut-off scores for dependence used in this study were: $alcohol \ge 3$ (Lawrinson, Copeland, Gerber, & Gilmour, 2007), benzodiazepines ≥ 3 (Ross & Darke, 1997), cannabis ≥ 3 (Swift, Copeland, & Hall, 1998), cocaine ≥ 3 (Kaye & Darke, 2002), heroin/opioids ≥ 4 (Gossop et al., 1995), methamphetamine ≥ 4 (Topp & Mattick, 1997) and gamma hydroxybutyrate (GHB) ≥ 5 (Degenhardt, Darke, & Dillon, 2002). For other drugs without published data using the SDS, cut-off scores of ≥ 3 were used. The SDS is not used to assess tobacco dependence. Instead, for clients with tobacco as their principal drug of concern, dependence was indicated by one or more days of tobacco use in the previous four weeks.

Psychological distress. The Kessler Psychological Distress Scale (K10) measured non-specific psychological distress in the previous four weeks (Kessler et al., 2002). Total scores range from 10–50, with higher scores indicating higher levels of distress. Using guidelines based on Australian normative data, scores of 10–15 indicate low distress, 16–21 moderate distress, 22–29 high distress and 30–50 very high distress (Slade, Grove, & Burgess, 2011).

Quality of life. The 8-item European Health Interview Survey Quality of Life index (EUROHIS-QOL-8) measured psychological, physical, social and environmental quality of life (Schmidt et al., 2006). This is a short-form version of the World Health Organization Quality of Life Instrument—Abbreviated Version. Total scores range from 1–5, with higher scores indicating a better quality of life.

Outcome measures

Primary outcomes in this study were changes from baseline in:

- days of use of principal drug of concern in the previous four weeks
- Severity of Dependence Scale (SDS) scores.

Secondary outcomes examined changes from baseline in:

- Kessler Psychological Distress Scale (K10) scores
- Quality of Life index (EUROHIS-QOL-8) scores.

Statistical analyses

Baseline comparisons

All analyses were conducted using Stata Version 16.0. The first section of the results compares the baseline characteristics of clients of ACON and mainstream services, including sociodemographic characteristics, use of principal drug of concern and other substances at treatment entry, and psychosocial wellbeing at treatment entry. Differences within ACON clients (e.g. by gender or principal drug of concern) were also examined for some variables. We used t-tests to examine differences on continuous dependent variables with normal distributions, Mann-Whitney U tests for continuous variables with skewed distributions, chi-square tests for categorical variables, and Fisher's exact tests for categorical variables with expected cell counts of less than 5. Statistical significance was set at p<.05 for all baseline comparisons.

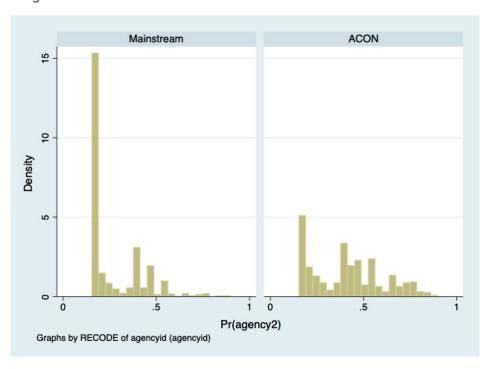
Comparison of treatment outcomes between ACON and mainstream services

Initially, we had intended to compare the treatment outcomes of ACON clients with clients of mainstream services, as the mainstream services included in this evaluation were selected due to their comparability (as noted above). However, in comparing the substance use patterns and sociodemographic characteristics of ACON and mainstream clients at treatment entry, it became evident that the treatment outcomes of the two groups were not comparable.

A major reason for this was that more than half (52%) of mainstream clients reported no use of their principal drug of concern in the four weeks preceding treatment entry (compared to 14% of ACON clients). There are a number of plausible reasons why mainstream clients may not report recent drug use at treatment entry, including referrals of clients from residential rehabilitation services who may already be abstinent (20% at mainstream services vs. 1% at ACON), and the higher proportion of mainstream clients referred from the criminal justice system compared to ACON (32% vs. 1%). The latter group may be reluctant to accurately report drug use due to fear of negative consequences (e.g. involuntary treatment cessation, or return to court). In addition to differences in the baseline use of principal drugs of concern and sources of referral between ACON and mainstream services, there were also differences in the principal drugs of concern which reduces the comparability of the two samples, with ACON clients more likely than mainstream clients to be seeking treatment for methamphetamine (58% vs. 36%) and less likely for opioids (3% vs. 17%) and cannabis (5% vs. 13%; see Figure 4).

Propensity score matching was considered as a solution to address the differences between clients of ACON and mainstream services and to generate comparable subsamples for analysis (Guo, Barth, & Gibbons, 2006). The results of this analysis are shown in Figure 1, based on days of use of principal drug of concern. While there was some overlap between the samples in propensity scores up to 0.5, mainstream services had fewer comparable cases than ACON for propensity scores over 0.5. This would have required the exclusion of a large number of ACON clients, which was not feasible given loss to follow-up at sessions four, eight and 12, as well as concerns about the generalisability of the generated subsample to the original sample. It was therefore decided not to proceed with the comparison of treatment outcomes between ACON and mainstream clients.

Figure 1. Propensity score matching for ACON and mainstream services on days of use of principal drug of concern



Treatment outcomes among ACON clients

Generalised estimating equation (GEE) models were used to examine changes from baseline in primary and secondary outcomes at counselling sessions 4, 8 and 12. For normally distributed continuous outcome variables, Gaussian family and identity link were used (e.g. SDS, K10, EUROHIS-QOL-8). For non-normally distributed continuous outcome variables, negative binomial family and log link were used (days of use of principal drug of concern). For binary outcome variables (e.g. abstinence, dependence), binomial family and logit link were used (Homish, Edwards, Eiden, & Leonard, 2010).

Repeated measures analyses using GEE were first conducted for all clients, then separate analyses were conducted and these were stratified by principal drug of concern, examining methamphetamine and alcohol only. There were an insufficient number of clients reporting other drugs of concern to examine treatment outcomes for these substances, and due to the range of other principal drugs of concern reported, these clients could not be meaningfully grouped together as a single category for analysis. Gender was included as a covariate in all GEE analyses.

The study was sufficiently powered to conduct one-sample repeated measures analysis to detect medium effects (f =.25) with 80% power and 5% two-tailed significance. For the analyses restricted to clients reporting alcohol as their principal drug of concern, there was sufficient power to detect medium effects at sessions 4 and 8, but only large effects (f =.40) at session 12.

For repeated measures analyses, the first step was an overall significance test for time for each outcome variable. If the overall test was significant at < p.05, a second test was conducted examining differences between baseline and each time point (session 4, 8 and 12). Because of the multiple comparisons at step 2, alpha adjustments were made using the Hochberg step-up procedure (Hochberg, 1988). This procedure involves ranking p-values from largest to smallest, and applying a stronger correction for multiplicity to each subsequent p-value. For example, for analyses with three comparisons, the first p-value to determine statistical significance was .05, the second was .025, and the third was .017.

Some additional analyses were also conducted. The baseline characteristics of ACON clients who were abstinent at their most recent progress interview or had reduced the days of use of their principal drug of concern by at least 50% were compared with those of clients who had not reduced their use to this extent. Comparisons for continuous variables used t-tests or Mann-Whitney U tests, and categorical variables used chi-square tests.

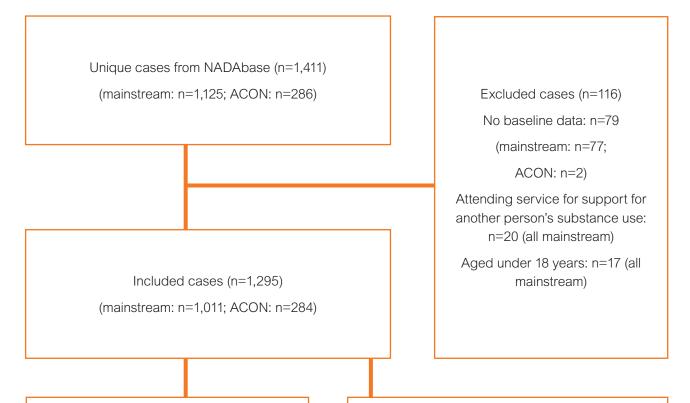
Baseline characteristics were also compared according to whether clients were retained in treatment for at least four sessions (i.e. had completed at least one progress interview). If there were significant differences (at p<.05), comparisons were made according to the number of progress interviews completed (one, two, three or more). For these latter comparisons, one-way analysis of variance (ANOVA), Kruskal-Wallis tests, and logistic regression were used.

Baseline characteristics

Sample description

The dataset included 1,411 clients who commenced treatment between January 2016 and December 2018, including 286 clients from ACON and 1125 clients from five mainstream services. One hundred and sixteen clients were excluded (n=2 from ACON) due to ineligibility or missing data, resulting in 284 ACON clients and 1,011 mainstream clients (see Figure 2). Fifty-seven percent of ACON clients (n=161) and 27.6% of mainstream clients had completed at least one progress interview during treatment within 14 and 365 days of commencing treatment.

Figure 2. Included participants, attrition at each progress interview, and attrition according to different time periods within 12 months of treatment commencement



Mainstream services (n=1,011)

Any progress interview completed:

n=284 (28.1%)

Progress 1: n=188

Progress 2: n=59

Progress 3: n=13

Progress 4: n=2

Progress 5: n=0

Progress 6: n=0

Exit interview: n=114

Different services follow different protocols for when progress interviews are conducted.

ACON (n=284)

Any progress interview completed: 161 (56.7%)

Progress 1 (session 4): n=160

Progress 2 (session 8): n=95

Progress 3 (session 12): n=33

Progress 4 (session 16): n=14

Progress 5 (session 20): n=8 Progress 6 (session 24): n=4

Exit interview (session unspecified): n=14

ACON conducts progress interviews every fourth counselling session.

The mean age of ACON clients was 38 years. Most of ACON's clients during the study period were men (82.0%), identified as gay / lesbian (84.5%), were born in Australia (72.5%) were in paid employment (62.3%) and lived in rented or privately owned accommodation (86.6%) (see Table 1). Among ACON clients, 61.6% reported that they were HIV-negative at treatment entry, 27.5% were HIV-positive, and 10.9% were of unknown HIV status. All HIV-positive clients were men. Mainstream services do not routinely ask clients about their HIV status, so HIV status cannot be reported for these clients.

ACON reported eight trans women and five trans men clients, who have been coded in Table 1 as female and male according to their current gender identity. This was done because for some transgender clients at ACON, gender may have been recorded by their counsellor as their current gender identity (i.e. female, male) rather than specifically as transgender female or male, as the questionnaire categories do not specify cisgender female and male. It is therefore possible than transgender clients were underreported in this sample.

The sociodemographic profile of clients of ACON's Substance Support Service compared with clients of mainstream counselling services were markedly different. Firstly, very few clients of mainstream services were reported as lesbian, gay, bisexual or queer (five clients in total). However, almost one-quarter (23.9%) of mainstream clients did not have their sexual identity recorded, so it is possible that LGBQ clients were underreported in mainstream services. Mainstream services reported no transgender or non-binary clients during the study period, but had one intersex client. Mainstream services also had a higher proportion of female clients compared to ACON (see Table 1).

In addition to differences in sexual and gender identities, ACON clients were older than mainstream clients, were more likely to be born in Australia or Europe and less likely to be born in North Africa, the Middle East or Asia, and less likely to identify as Aboriginal and / or Torres Strait Islander (see Table 1). ACON clients were also more likely to identify English as their preferred language, with almost all ACON clients reporting this (98.2% vs. 79.4%).

ACON clients were more likely to be in paid employment, while mainstream clients were more likely to be in receipt of a temporary benefit. A large proportion of mainstream clients had no employment or income status recorded (38.4%). ACON clients were also more likely than mainstream clients to be in stable accommodation (rented or privately owned home). However, more than 40% of mainstream clients had no accommodation status recorded (see Table 1).

Table 1. Comparison of sample characteristics of ACON and mainstream clients at treatment commencement

	Mainstream	ACON	Test	p-value
	(n=1,011)	(n=284)	statistic	
	n (%)	n (%)		
Mean age (SD)	36.3 (10.2)	38.5 (10.7)	3.12	.002
Gender			53.61	<.001
Female	220 (21.8)	37 (13.0)		
Male	790 (78.1)	233 (82.0)		
Non-binary/indeterminate/ intersex	1 (0.1)	14 (4.9)		
Sexual identity			1200.00	<.001
Lesbian, gay, homosexual	5 (0.5)	240 (84.5)		
Bisexual	0 (0.0)	10 (3.5)		
Queer	0 (0.0)	20 (7.0)		
Heterosexual	764 (75.6)	6 (2.1)		
Not stated	242 (23.9)	8 (2.8)		
Country of birth			99.97	<.001
Australia	628 (62.1)	206 (72.5)		
New Zealand / Pacific Islands	62 (6.1)	12 (4.2)		
Europe	29 (2.9)	26 (9.2)		
North Africa / Middle East	124 (12.3)	3 (1.1)		
Asia	142 (14.0)	17 (6.0)		
North America	0 (0.0)	9 (3.2)		
Central / South America	13 (1.3)	7 (2.5)		
Sub-Saharan Africa	13 (1.3)	4 (1.4)		
Aboriginal and/or Torres Strait Islander	00 (0.4)	14 (0.0)	73.88	<.001
Yes	82 (8.1)	11 (3.9)		
No	893 (88.3)	223 (78.5)		
Not stated Preferred language	36 (3.6)	50 (17.6)	57.10	<.001
	002 (70.4)	270 (00.0)	37.10	<.001
English Another language	803 (79.4) 208 (20.6)	279 (98.2)		
Employment / income	200 (20.0)	5 (1.8)	347.58	<.001
Full-time	116 (11.5)	124 (43.7)	347.50	<.001
	, ,	, ,		
Part-time	45 (4.5)	53 (18.7)		
Temporary benefit	392 (38.8)	46 (16.2)		
Pension / student allowance	37 (3.7)	36 (12.7)		
No income / something else	33 (3.3)	18 (6.3)		
Not stated	388 (38.4)	7 (2.5)		
Accommodation			147.17	<.001
Rented house or flat	459 (45.4)	194 (68.3)		
Privately owned house or flat	48 (4.7)	52 (18.3)		
Temporary or supported accommodation	32 (3.2)	10 (3.5)		
Prison / detention centre	37 (3.7)	0 (0.0)		
No usual accommodation / homeless	17 (1.7)	8 (2.8)		
Something else / Not stated	418 (41.3)	20 (7.0)		
·	· '	. ,		

Table 2 reports the gender and sexual identity of ACON clients in more detail. Among male clients (presumed to be predominantly cisgender), the majority identified as gay (96.5%). Three men identified as heterosexual, and it is possible that these were trans men. Among female clients, there was greater diversity in sexual identities than among men. There was no majority identity, with 41.4% of women identifying as lesbian or gay, 34.5% as queer, and 20.7% as bisexual. The numbers of trans men and trans women were too small to make inferences about sexual identity, although three of the five trans men had no sexual identity category recorded, which likely means that these clients did not identify with any of the available categories or preferred to use no label. Among the trans women clients, sexual identity was spread among lesbian/gay, queer, not stated (e.g. other identity or no label), bisexual and heterosexual. Non-binary clients identified as lesbian, gay or queer, and two clients had no sexual identity recorded (e.g. other identity or no label) (see Table 2).

Table 2. Gender and sexual identity of ACON clients

	Maleª (∩=228)	Female ^a (n=29)	Trans male (n=5)	Trans female (n=8)	Non-binary (n=14)
	n (%)	n (%)	n	n	n (%)
Heterosexual	3 (1.3)	0 (0.0)	2	1	0 (0.0)
Lesbian, gay, homosexual	220 (96.5)	12 (41.4)	0	2	6 (42.9)
Bisexual	3 (1.3)	6 (20.7)	0	1	0 (0.0)
Queer	2 (0.9)	10 (34.5)	0	2	6 (42.9)
Not stated	0 (0.0)	1 (3.4)	3	2	2 (14.3)

a While the majority of clients recorded as male and female were likely to be cisgender, some trans clients may have been included here according to their affirmed gender.

Treatment referral and cessation

The median duration of treatment among ACON clients was 112 days (interquartile range 28 - 203 days) and 96 days among clients of mainstream services (interquartile range 49 - 181 days). The difference between ACON and mainstream clients in median days of treatment was not statistically significant (z=0.98, p=.33).

The majority of clients attending ACON's service referred themselves into treatment (84.9%) (see Table 3). Smaller numbers of clients were referred by a family member or friend, their GP or a doctor, or another outpatient service. Few ACON clients were referred from residential rehabilitation, hospital, or the criminal justice system. In comparison, the most common referral pathway into treatment for clients of mainstream services was via the criminal justice system (31.9%), followed by self-referral (26.4%) and referral from residential rehabilitation or another residential service (20.4%) (see Table 3).

Table 3. Source of referral into treatment

	Mainstream (n=1,011) n (%)	ACON (n=284) n (%)
Self-referral	267 (26.4)	241 (84.9)
Family member / friend	44 (4.4)	10 (3.5)
General practitioner / doctor	19 (1.9)	10 (3.5)
Non-residential AOD, health or support service	56 (5.5)	9 (3.2)
Criminal justice system	323 (31.9)	4 (1.4)
Residential AOD treatment service / other residential service	206 (20.4)	4 (1.4)
Hospital	26 (2.5)	3 (1.1)
Other	67 (6.6)	3 (1.1)
Not stated	4 (0.4)	0 (0.0)

The most common reason for ceasing attendance at the service among ACON clients was successful completion of treatment (38.4%), followed by leaving without notice (31.0%), and referral to another service (7.0%) (see Table 4). The most common reason for cessation among clients of mainstream services was also completing treatment (46.6%) followed by leaving without notice (16.9%). However, a higher proportion of mainstream clients had their treatment terminated due to non-compliance, left against clinical advice, or were imprisoned (see Table 4).

Table 4. Reasons for cessation of treatment

	Mainstream (n=1,011) n (%)	ACON (n=284) n (%)
Service completed	471 (46.6)	109 (38.4)
Left without notice	171 (16.9)	88 (31.0)
Referred to another service	42 (4.2)	20 (7.0)
Moved out of area	1 (0.1)	7 (2.5)
Left involuntarily (non-compliance)	58 (5.7)	4 (1.4)
Left against advice	48 (4.7)	4 (1.4)
Imprisoned	36 (3.6)	0 (0.0)
Sanctioned by drug court / court diversion	3 (0.3)	0 (0.0)
Other reason	62 (6.1)	20 (7.0)
Not stated	119 (11.8)	32 (11.3)

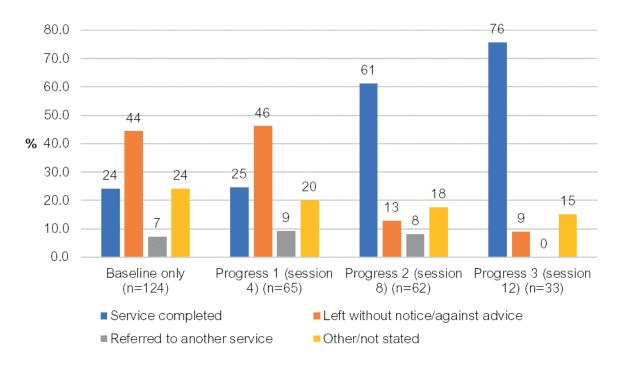
Additional analyses were conducted for ACON clients only to examine possible associations with different reasons for treatment cessation (see Table 5 and Figure 3). Table 5 reports reasons for treatment cessation among ACON clients by their principal drug of concern (methamphetamine or alcohol). There were no differences in reasons for treatment cessation between clients seeking treatment for methamphetamine and clients seeking treatment for alcohol (χ^2 =4.20, p=.76). Reasons for treatment cessation were comparable to the broader sample of ACON clients.

Table 5. Reasons for cessation of treatment among ACON clients with methamphetamine or alcohol as principal drug of concern

	Principal drug c	of concern
	Methamphetamine (n=164) n (%)	Alcohol (n=73) n (%)
Service completed	59 (36.0)	30 (41.1)
Left without notice	55 (33.5)	22 (30.1)
Referred to another service	11 (6.7)	3 (4.1)
Moved out of area	4 (2.4)	2 (2.7)
Left involuntarily (non-compliance)	3 (1.8)	0 (0.0)
Left against advice	3 (1.8)	1 (1.4)
Other reason	13 (7.9)	4 (5.5)
Not stated	16 (9.8)	11 (15.1)

Figure 3 compares reasons for treatment cessation among ACON clients according to the number of counselling sessions attended (i.e. completed progress interviews). Clients who were retained in treatment for less than eight sessions (i.e. completed the baseline assessment or the first progress interview at counselling session four) were more likely than clients retained in treatment for eight or more sessions to have left treatment without notice, against advice or involuntarily, and were less likely to have completed treatment ($\chi^2=55.55$, p<.001).

Figure 3. Reasons for cessation of treatment among ACON clients by completed counselling sessions



Principal drug of concern

Among ACON clients, the most common principal drug of concern (i.e. the drug that participants were seeking treatment for) was methamphetamine (57.7%), followed by alcohol (25.7%) and cannabis (4.6%) (see Table 6). Only a minority of clients were seeking assistance for other substances (less than 10 clients per substance). Among ACON clients, men were more likely than women to be seeking treatment for methamphetamine use, and less likely to be seeking treatment for alcohol (χ^2 =28.09, p<.001).

All clients seeking treatment for GHB (n=5) or cocaine (n=4) use were men, although this should be interpreted with caution due to the small number of clients represented. While a higher proportion of women than men were seeking treatment for tobacco and benzodiazepine use, this only comprised four and three female clients respectively. Among the 14 non-binary clients, alcohol was the most common principal drug of concern (n=8) (see Table 6).

Table 6. Principal drug of concern among ACON clients at treatment commencement

	All (n=284) n (%)	Male (n=233) n (%)	Female (n=37) n (%)	Non-binary (n=14) n (%)
Methamphetamine	164 (57.7)	151 (64.8)	10 (27.0)	3 (21.4)
Alcohol	73 (25.7)	48 (20.6)	17 (45.9)	8 (57.1)
Heroin / other opioids	8 (2.8)	7 (3.0)	1 (2.7)	0 (0.0)
Cannabis	13 (4.6)	10 (4.3)	1 (2.7)	2 (14.3)
Tobacco	7 (2.5)	3 (1.3)	4 (10.8)	0 (0.0)
Benzodiazepines	6 (2.1)	2 (0.9)	3 (8.1)	1 (7.1)
GHB*	5 (1.8)	5 (2.1)	0 (0.0)	0 (0.0)
Cocaine	4 (1.4)	4 (1.7)	0 (0.0)	0 (0.0)
Other stimulants / hallucinogens	4 (1.4)	3 (1.3)	1 (2.7)	0 (0.0)

Note. Trans men have been included under "Male" and trans women under "Female".

Figure 4 compares the principal drug of concern among clients of ACON and mainstream services. Compared to mainstream services, ACON clients were more likely to be seeking treatment for methamphetamine use, while clients of mainstream services were more likely than ACON client to be seeking treatment for heroin and other opioid use, and cannabis use (χ^2 =98.05, p<.001).

^{*}GHB—gamma-hydroxybutyrate.

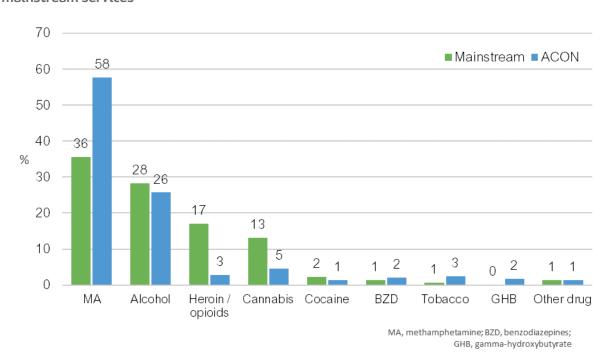


Figure 4. Principal drug of concern at treatment commencement, comparing clients of ACON and mainstream services

Among ACON clients with methamphetamine as their principal drug of concern (n=164), the most commonly reported primary routes of administration were smoking (46.3%) followed by injecting (40.2%). Ten percent of clients did not state their preferred route. Compared to clients of mainstream services, ACON clients were more likely to report injecting as their primary route of methamphetamine use (mainstream: 28.9%) and less likely to report smoking (mainstream: 56.1%; χ^2 =6.52, p=.04).

Baseline substance use and psychosocial function

Nine out of ten ACON clients had scores on the Severity of Dependence Scale (SDS), indicative of dependence on their principal drug of concern, and had used this substance on a median of 8 days in the previous four weeks (see Table 7). Fourteen percent of ACON clients reported no use of their principal drug of concern in the four weeks prior to commencing treatment.

The majority of ACON clients reported alcohol use in the previous four weeks (82.7%), and more than half of all clients (58.5%) reported single occasion risky alcohol use (defined as consumption of more than four standard drinks on any one occasion) (see Table 7). More than half of clients (55.3%) also reported methamphetamine use in the previous four weeks, and over a third (38.0%) reported daily tobacco use. The most commonly used other substances among ACON clients were cannabis (30.6%) and benzodiazepines / other sedatives (23.6%) (see Table 7).

It should be noted that days of methamphetamine use was assessed with a single questionnaire item and included all methamphetamine forms, including crystal, powder (speed) and base. We could therefore not distinguish between clients who were seeking treatment for crystal methamphetamine use from other forms of methamphetamine. Follow-up discussions with ACON staff suggest that most, if not all, people seeking treatment at their service for methamphetamine use are primarily using crystal methamphetamine.

The mean score of ACON clients on the K10 at treatment entry was 27.5, indicative of high levels of psychological distress in the four weeks prior to treatment entry. Almost three-quarters of clients had a K10 score indicative of high levels of psychological distress (see Table 7) at treatment entry. The mean quality of

life score (EUROHIS-QOL-8) among ACON clients was 3.0. Total scores range from 1 to 5 with higher scores indicating better quality of life. In the study that psychometrically tested the EUROHIS-QOL-8, the mean quality of life score among "healthy" adults was 3.8 (Schmidt et al., 2006). Eighteen percent of ACON clients had quality of life total scores above 3.8 at treatment entry.

Table 7. Substance use and psychosocial function at treatment commencement

	Mainstream (n=1,011) n (%)	ACON (n=284) n (%)	Test statistic	p-value
Principal drug of concern				
SDS score (M, SD)	7.0 (4.0)	8.0 (3.4)	4.00	<.001
SDS dependence (n, %) ^a	800 (79.1)	256 (90.1)	17.86	<.001
Any use in past 4 weeks (n, %)	487 (48.2)	243 (85.6)	126.05	<.001
Days used in past 4 weeks (median, IQR)	0 (0,6)	8 (2,20)	11.74	<.001
Substances used in past 4 weeks (n, %)				
Alcohol	431 (42.6)	235 (82.7)	142.84	<.001
Single risk alcohol use ^b	294 (29.1)	166 (58.5)	83.51	<.001
Daily tobacco use	661 (65.4)	108 (38.0)	68.77	<.001
Cannabis	217 (21.5)	87 (30.6)	10.38	.001
Methamphetamine	205 (20.3)	157 (55.3)	134.90	<.001
Benzodiazepines / sedatives	66 (6.5)	67 (23.6)	70.05	<.001
Cocaine	43 (4.3)	42 (14.8)	40.13	<.001
Heroin / other opioids	148 (14.6)	19 (6.7)	12.47	<.001
Other illicit substances	93 (9.2)	65 (22.9)	38.78	<.001
Psychosocial functioning				
K10 score (M, SD)	22.8 (9.6)	27.5 (7.8)	7.63	<.001
High / very high K10 scorec (n, %)	495 (49.0)	209 (73.6)	54.21	<.001
EUROHIS-QOL-8 score (M, SD)	3.3 (0.8)	3.0 (0.8)	4.17	<.001

a According to SDS cut-offs for dependence for different substances.

EUROHIS-QOL-8, World Health Organization Quality of Life Instrument-Abbreviated Version, Short-Form; K10, Kessler Psychological Distress Scale; SDS, Severity of Dependence Scale.

IQR, interquartile range; M, mean; SD, standard deviation.

b Any occasion in past 4 weeks in which >4 standard drinks were consumed.

c High K10 score: 22-29; Very high K10 score: 30-50.

On every substance use and psychosocial indicator, differences between clients of ACON and mainstream services were statistically significant (see Table 7). Regarding principal drugs of concern, ACON clients reported higher mean SDS scores and were more likely to be categorised as dependent than clients of mainstream services, were more likely to report any use of the principal drug of concern in the previous four weeks and were also more likely to report a higher median number of days used.

Regarding the use of individual substances, ACON clients were more likely than mainstream clients to report any use of cannabis, methamphetamine, benzodiazepines, cocaine, and alcohol in the four weeks prior to treatment entry, and more likely to report single occasion risky alcohol use (see Table 7). They were less likely than mainstream clients to report daily tobacco use and the use of heroin and other opioids, but more likely to report use of any other substance.

At treatment commencement, ACON clients reported higher mean levels of psychological distress than mainstream clients (measured with the K10), and a higher proportion of ACON clients reported high or very high levels of psychological distress (73.6% vs. 49.0%). ACON clients also reported lower mean scores on the EUROHIS-QOL-8, although the mean difference was relatively small (-0.3) (see Table 7).

Injecting drug use

Fifty-one percent of ACON clients reported having ever injected drugs, and 34.2% reported injecting in the three months prior to treatment entry (see Table 8). Among clients who reported recent injecting (i.e. the previous three months), 17.5% reported having used a needle and syringe after another person had used it (receptive sharing), and 22.7% reported having shared other injecting equipment with another person in the previous three months (e.g. spoons, water or filters).

Compared to clients of mainstream services, ACON clients were more likely to report lifetime and recent injecting drug use. Among participants who had recently injected drugs, ACON clients were no more likely than mainstream clients to report receptive sharing of a needle and syringe, nor any sharing of other injecting equipment (see Table 8).

Table 8. Injecting drug use at treatment commencement

	Mainstream n (%)	ACON n (%)	Test statistic	p-value
All clients	(n=1,011)	(n=284)		
Injecting drug use			82.17	<.001
Never	654 (64.7)	137 (48.2)		
Past 3 months	131 (13.0)	97 (34.2)		
3 to 12 months ago	59 (5.8)	25 (8.8)		
More than 12 months ago	124 (12.3)	24 (8.5)		
Not stated	43 (4.3)	1 (0.4)		
Clients who injected in the past 3 months	n=131	n=97		
Receptive sharing of needle / syringe			0.61	.43
Yes	18 (13.7)	17 (17.5)		
No	113 (86.3)	80 (82.5)		
Shared other injecting equipment			0.66^{a}	.42
Yes	24 (18.3)	22 (22.7)		
No	52 (39.7)	75 (77.3)		
Not stated	55 (42.0)	0 (0.0)		

a This analysis reassigned participants at mainstream services with 'Not stated' as 'No'.

Treatment outcomes among ACON clients

The remainder of the results examine substance use and psychosocial wellbeing outcomes during treatment among ACON clients only. For the repeated measures analyses (generalised estimating equations [GEE]) examining substance use and psychosocial wellbeing during treatment, analyses were conducted for all clients (n=284), followed by separate analyses for clients who reported methamphetamine (n=164) and alcohol (n=73) as their principal drugs of concern. As noted in the Methods section, when multiple tests of significance were conducted to examine changes from baseline over time, *p*-values were adjusted to determine significance using the Hochberg procedure.

Use of principal drug of concern

The results of repeated measures analyses of principal drug of concern (days of use in the previous 4 weeks, Severity of Dependence Scale [SDS] scores) comparing baseline assessments with those conducted following counselling sessions 4, 8 and 12 are shown in Table 9. Bolded parameter estimates (i.e. odds ratios, risk ratios) and confidence intervals represent statistically significant differences from baseline. For the analyses including all ACON clients, there was a reduction in the median days of use of the principal drug of concern compared to baseline among clients who completed assessments at session 4, 8 and 12 (all p<.001), and an increase at each time point in the proportion of clients reporting abstinence in the previous four weeks (all p<.001). At each time point, there was a reduction in the mean SDS score compared to baseline (all p<.001), and reductions in the proportions of clients categorised as dependent on their principal drug of concern according to SDS cut-off scores (session 4: p=.03; session 8: p<.001; session 12: p=.009).

For clients with methamphetamine as their principal drug of concern, there were reductions in days of methamphetamine use at each time point compared to baseline (all p<.001), and increases in the proportion of clients reporting abstinence in the previous four weeks (session 4: p<.001; session 8: p<.001; session 12: p=.003) (see Table 9). There was also a reduction at each time point in SDS mean scores (session 4: p=.002; session 8: p<.001; session 12: p<.001) and a decrease in the proportion of clients reporting methamphetamine dependence (session 4: p=.02; session 8: p<.001; session 12: p=.007).

For clients with alcohol as their principal drug of concern, there was a reduction in SDS mean scores at each assessment (session 4: p=.004; session 8: p<.001; session 12: p=.01). There were no statistically significant changes from baseline in days of use or the proportion of clients reporting alcohol abstinence or dependence (see Table 9).

Figure 5 compares the median days of any alcohol use and heavy alcohol use in the previous four weeks among clients with alcohol as their principal drug of concern. Heavy alcohol use was defined as "more heavily than usual" and not a specific threshold number of standard drinks that was applied to all clients. Examining heavy alcohol use, there was a statistically significant change in the median days of use from baseline at session 8 only (median change of 1 day; incidence risk ratio=0.60; 95% confidence interval 0.37-0.97; p=0.04).

Figure 5. Median days of alcohol use and heavy alcohol use among ACON clients with alcohol as principal drug of concern

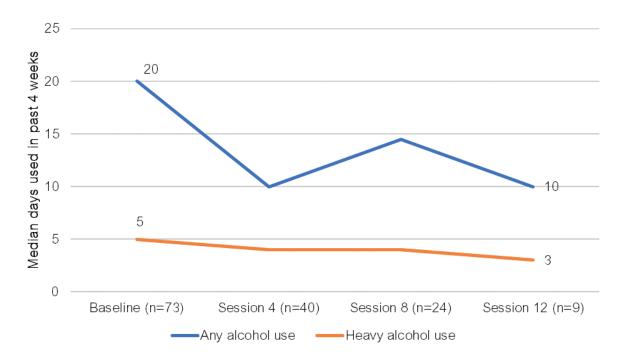


Table 9. Change in use of principal drug of concern during treatment among ACON clients, and by clients with methamphetamine and alcohol as principal drugs of concern

	All clients (n=284)			Methamphetamine (n=164)			Alcohol (n=73)		
	n	Desc.	OR or IRR (95% CI)	n	Desc.	OR or IRR (95% CI)	n	Desc.	OR or IRR (95% CI)
Number of days used in previous 4 weeks		median (IQR)			median (IQR)			median (IQR)	
Baseline	284	8 (2-20)	-	164	4 (2-10)	-	73	20 (12-24)	-
Session 4	160	4 (0-10)	0.64 (0.57, 0.72)	97	2 (0-5)	0.48 (0.40, 0.59)	40	10 (4-20)	0.73 (0.55, 0.96)
Session 8	95	4 (0-12)	0.66 (0.57, 0.76)	59	1 (0-6)	0.50 (0.39, 0.63)	24	14.5 (8-20.5)	0.80 (0.57, 1.13)
Session 12	33	5 (0-10)	0.58 (0.47, 0.73)	21	1 (0-8)	0.44 (0.30, 0.64)	9	10 (5-14)	0.64 (0.38, 1.09)
Clients abstinent in previous 4 weeks		n (%)			n (%)			n (%)	
Baseline	284	41 (14.4)	-	164	29 (17.7)	-	73	4 (5.5)	-
Session 4	160	44 (27.5)	2.09 (1.52, 2.88)	97	36 (37.1)	2.41 (1.63, 3.56)	40	3 (7.5)	1.10 (0.41, 2.96)
Session 8	95	29 (30.5)	2.37 (1.63, 3.45)	59	24 (40.7)	2.74 (1.74, 4.32)	24	2 (8.3)	1.46 (0.48, 4.41)
Session 12	33	13 (39.4)	2.69 (1.55, 4.66)	21	10 (47.6)	2.82 (1.44, 5.54)	9	2 (22.2)	3.28 (0.91, 11.87)
SDS score		mean (SD)			mean (SD)			mean (SD)	
Baseline	284	8.0 (3.4)	-	164	7.7 (3.3)	-	73	8.4 (3.3)	-
Session 4	160	6.9 (3.2)	0.34 (0.21, 0.56)	97	6.6 (3.2)	0.38 (0.21, 0.69)	40	7.3 (3.3)	0.26 (0.10, 0.65)
Session 8	95	5.9 (3.2)	0.12 (0.07, 0.22)	59	5.4 (3.1)	0.11 (0.05, 0.22)	24	6.4 (3.1)	0.09 (0.03, 0.29)
Session 12	33	5.7 (3.1)	0.09 (0.03, 0.23)	21	5.4 (3.2)	0.07 (0.02, 0.23)	9	6.2 (2.9)	0.11 (0.02, 0.63)
SDS dependence		n (%)			n (%)			n (%)	
Baseline	284	257 (90.5)	-	164	147 (89.6)	-	73	68 (93.2)	-
Session 4	160	133 (83.1)	0.49 (0.31, 0.80)	97	79 (81.4)	0.51 (0.29, 0.89)	40	37 (92.5)	0.85 (0.23, 3.19)
Session 8	95	72 (75.8)	0.29 (0.17, 0.49)	59	43 (72.9)	0.27 (0.15, 0.50)	24	20 (83.3)	0.32 (0.09, 1.14)
Session 12	33	27 (81.8)	0.40 (0.18, 0.89)	21	16 (76.2)	0.30 (0.13, 0.72)	9	8 (88.9)	0.58 (0.07, 4.74)

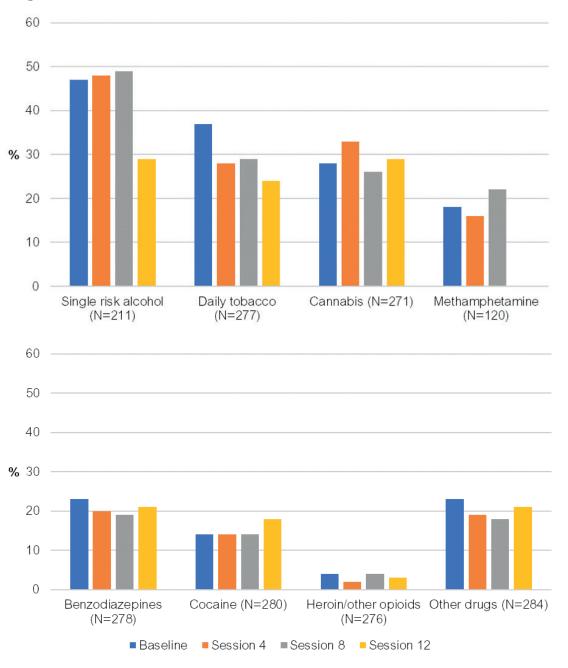
CI, confidence interval; Desc., descriptive statistics; IQR, interquartile range; IRR, incidence risk ratio; OR, odds ratio; SD, standard deviation; SDS, Severity of Dependence Scale. Bolded values represent statistically significant results.

Other substance use outcomes

Figure 6 reports clients' use of substances other than their principal drug of concern in the previous four weeks, at baseline and at each progress interview during treatment. For each substance, clients who reported that substance as their principal drug of concern were excluded.

Repeated measures analyses were conducted using GEE for each of the substances (see Figure 6), and with the exception of daily tobacco use, no statistically significant findings were detected. For tobacco, there was a reduction from baseline in the proportion of clients reporting daily use at session 4 (36.8% vs 28.4%; OR=0.71, 95% CI 0.54-0.93; p=.01), session 8 (29.0%; OR=0.68, 95% CI 0.48-0.96; p=.03) and session 12 (24.2%; OR=0.51, 95% CI 0.29-0.89; p=.02).

Figure 6. Use of substances other than the principal drug of concern in the previous four weeks among ACON clients



Note. Sample size differs for each substance as clients were excluded who reported that substance as principal drug of concern. "Other drugs" includes all clients. Single risk alcohol use refers to any occasion in past 4 weeks in which >4 standard drinks were consumed.

Figure 7 compares patterns of injecting drug use at baseline and during treatment among clients with methamphetamine as their principal drug of concern. Reductions in the proportion of clients reporting injecting drug use in the previous 3 months were reported at each time point, an overall reduction in receptive sharing of needles and syringes between baseline and session 12, and reductions between baseline and each assessment for the sharing of other injecting equipment. However, these findings should be interpreted with caution as participants were asked to report on the previous three months rather than the previous four weeks as was done for other drug use questions. As the median duration of treatment among ACON clients was four months (112 days), many clients would still be reporting on pre-treatment injecting drug use when completing assessments during treatment, particularly at sessions 4 and 8. Due to this consideration, tests to determine statistical significance were not conducted for these findings.

Figure 7. Injecting drug use and sharing of injecting equipment in previous 3 months among clients with methamphetamine as principal drug of concern



Psychosocial outcomes

Table 10 reports the results of repeated measures analyses of psychological distress (K10) and quality of life (EUROHIS-QOL-8), comparing baseline assessments with those conducted following counselling sessions 4, 8 and 12. Bolded odds ratios and confidence intervals represent statistically significant differences from baseline. For analyses including all clients, there were reductions in mean K10 scores (psychological distress in the previous four weeks) at each time point compared to baseline (all p<.001), and reductions in the proportion of respondents with K10 scores indicative of high or very high levels of psychological distress (session 4: p=.001; session 8: p<.001; session 12: p<.001). There were also increases in EUROHIS-QOL-8 scores from baseline at sessions 4, 8 and 12 (all p<.001), indicating improvements in perceived quality of life.

For clients with methamphetamine as their principal drug of concern, there were reductions in mean K10 scores at each assessment compared to baseline (session 4: p<.001; session 8: p<.001; session 12: p=.001), and the proportion of clients reporting high or very high levels of psychological distress (session 4: p=.001; session 8: p<.001; session 12: p=.004). There were also improvements in quality of life scores at each time point (session 4: p<.001; session 8: p<.001; session 12: p=.001) (see Table 10).

For clients with alcohol as their principal drug of concern, there were reductions in mean K10 scores (session 4: p=.003; session 8: p<.001; session 12: p<.001), but no statistically significant change in the proportion of clients reporting high or very high psychological distress. There were increases in EUROHIS-QOL-8 scores among clients seeking treatment for alcohol at each assessment, compared to baseline (session 4: p<.001; session 8: p<.001; session 12: p=.001) (see Table 10).

Table 10. Change in psychosocial outcomes during treatment among ACON clients, and by clients with methamphetamine and alcohol as principal drugs of concern

		All clients (n=284)			Methamphet	amine (n=164)	Alcohol (n=73)			
	n	Desc.	OR (95% CI)	n	Desc.	OR (95% CI)	n	Desc.	OR (95% CI)	
K10 score		mean (SD)			mean (SD)			mean (SD)		
Baseline	284	27.5 (7.8)	-	164	26.5 (7.9)	-	73	29.0 (7.6)	-	
Session 4	160	24.0 (7.4)	0.03 (0.01, 0.08)	97	22.6 (7.4)	0.02 (0.004, 0.09)	40	26.2 (7.5)	0.05 (0.01, 0.36)	
Session 8	95	22.5 (6.8)	0.003 (0.001, 0.01)	59	21.0 (6.3)	0.003 (0.0004, 0.02)	24	25.2 (6.7)	0.003 (0.0002, 0.04)	
Session 12	33	22.8 (6.2)	0.002 (0.0002, 0.02)	21	22.7 (6.2)	0.01 (0.0003, 0.12)	9	23.7 (6.4)	0.0004 (0.00001, 0.02)	
High / very high K10 s	core	n (%)			n (%)			n (%)		
Baseline	284	209 (73.6)	-	164	115 (70.1)	-	73	56 (76.7)	-	
Session 4	160	98 (61.3)	0.57 (0.40, 0.80)	97	51 (52.6)	0.49 (0.32, 0.75)	40	29 (72.5)	0.75 (0.36, 1.54)	
Session 8	95	54 (56.8)	0.40 (0.26, 0.60)	59	30 (50.8)	0.39 (0.23, 0.66)	24	19 (79.2)	0.76 (0.32, 1.82)	
Session 12	33	18 (54.5)	0.30 (0.16, 0.57)	21	11 (52.4)	0.31 (0.14, 0.69)	9	6 (66.7)	0.47 (0.14, 1.60)	
EUROHIS-QOL-8 score	2	mean (SD)			mean (SD)			mean (SD)		
Baseline	284	3.0 (0.8)	-	164	3.1 (0.8)	-	73	2.9 (0.7)	-	
Session 4	160	3.4 (0.7)	1.41 (1.27, 1.56)	97	3.4 (0.7)	1.46 (1.27, 1.67)	40	3.4 (0.7)	1.42 (1.21, 1.67)	
Session 8	95	3.3 (0.7)	1.48 (1.31, 1.68)	59	3.4 (0.7)	1.50 (1.27, 1.78)	24	3.3 (0.8)	1.43 (1.18, 1.75)	
Session 12	33	3.3 (0.7)	1.59 (1.30, 1.94)	21	3.3 (0.6)	1.54 (1.19, 2.00)	9	3.3 (0.9)	1.64 (1.22, 2.22)	

CI, confidence interval; Desc., descriptive statistics; EUROHIS-QOL-8, WHO Quality of Life Instrument-Abbreviated Version (8-item); K10, Kessler Psychological Distress Scale; OR, odds ratio; SD, standard deviation.

Bolded values represent statistically significant results.

Gender differences at treatment entry

There were too few female and non-binary clients to conduct statistical comparisons of treatment outcomes by gender. However, comparisons can be made by gender for these outcomes measured at treatment entry (see Table 11). Compared to male clients, female clients reported more use of their principal drug of concern in the four weeks prior to treatment entry (p<.001) and higher levels of psychological distress (p=.001). Male and female clients were similar to each other on other characteristics at baseline. The higher number of days of use of the principal drug of concern at baseline among women compared to men is largely due to a higher proportion of women than men seeking treatment for alcohol use, and a higher proportion of men seeking treatment for methamphetamine use. Among ACON clients, the median number of days of alcohol use at baseline was 20, while the median number of days of methamphetamine use was four.

Table 11. Comparison of substance use and psychosocial outcomes at treatment entry among ACON clients by gender

	Male (n=233)	Female (n=37)	Non- binary (n=14)	Test statistic	p-value
Use of principal drug of concern					
Median days used past 4 weeks (IQR)	6 (2-16)	18 (8-25)	14 (3-23)	13.41	.001
Mean SDS score (SD)	7.8 (3.4)	9.4 (3.3)	7.1 (3.4)	4.04	.02
Psychosocial wellbeing					
Mean K10 score (SD)	26.9 (7.8)	31.7 (6.8)	26.7 (6.7)	6.42	.002
Mean EUROHIS-QOL-8 score (SD)	3.0 (0.8)	2.8 (0.8)	3.5 (0.9)	3.23	.04

EUROHIS-QOL-8, WHO Quality of Life Instrument-Abbreviated Version (8-item); IQR, interquartile range; K10, Kessler Psychological Distress Scale; SD, standard deviation; SDS, Severity of Dependence Scale.

Sample characteristics by treatment retention and reduced substance use

Table 12 compares the baseline characteristics of ACON clients according to whether they completed any progress interview (i.e. were retained in treatment for four or more counselling sessions), and according to the number of progress interviews completed (i.e. completed eight sessions, completed 12 sessions). There were few differences between clients according to the number of completed sessions, with the exception of employment and accommodation status. Compared to clients who completed no progress interviews, clients who completed at least one progress interview were more likely to be in paid employment (χ^2 =6.44, p=.01) and to have stable accommodation (χ^2 =5.07, p=.02).

Table 12. Baseline characteristics of ACON clients according to number of sessions attended

Baseline characteristics	Baseline	Completed progress interviews			
	only (n=124)	Any (n=160)	Session 4 (n=65)	Session 8 (n=62)	Session 12 (n=33)
Demographic characteristics					
Mean age (SD)	38.9 (10.6)	38.1 (10.7)	37.7 (9.8)	38.0 (11.5)	39.2 (11.3)
Gender, n (%)					
Male	100 (80.6)	133 (83.1)	56 (86.2)	47 (75.8)	30 (90.9)
Female	18 (14.5)	19 (11.9)	6 (9.2)	11 (17.7)	2 (6.1)
Non-binary	6 (4.8)	8 (5.0)	3 (4.6)	4 (6.5)	1 (3.0)
Identify as gay/lesbian, n (%)	101 (81.5)	139 (86.9)	56 (86.2)	53 (85.5)	30 (90.9)
Born in Australia, n (%)	94 (75.8)	112 (70.0)	43 (66.2)	45 (72.6)	24 (72.7)
Paid employment, n (%)	67 (54.0)	110 (68.8)	45 (69.2)	41 (66.1)	24 (72.7)
Live in rented/owned accommodation, n (%)	101 (81.5)	145 (90.6)	57 (87.7)	58 (93.5)	30 (90.9)
HIV-positive (self-report), n (%)	36 (29.0)	42 (26.3)	20 (30.8)	14 (22.6)	8 (24.2)
Use of principal drug of concern					
Median days used past 4 weeks (IQR)	8.5 (2-21)	7 (2-19)	7 (2-20)	7 (3-16)	10 (0-16)
Mean SDS score (SD)	8.2 (3.4)	7.9 (3.4)	7.9 (3.5)	8.0 (3.3)	7.5 (3.7)
Injecting drug use in past 3 months					
Any injecting	45 (36.3)	52 (32.5)	25 (38.5)	19 (30.6)	8 (24.2)
Receptive sharing needle/ syringe	11 (8.9)	6 (3.8)	3 (4.6)	2 (3.2)	1 (3.0)
Shared other injecting equipment	13 (10.5)	9 (5.6)	5 (7.7)	3 (4.8)	1 (3.0)
Baseline psychosocial wellbeing					
Mean K10 score (SD)	27.1 (8.1)	27.8 (7.6)	26.4 (7.7)	28.5 (7.7)	29.4 (6.9)
Mean EUROHIS-QOL-8 score (SD)	3.0 (0.8)	3.0 (0.7)	3.1 (0.8)	3.0 (0.7)	2.9 (0.7)

EUROHIS-QOL-8, WHO Quality of Life Instrument-Abbreviated Version (8-item); IQR, interquartile range; K10, Kessler Psychological Distress Scale; SD, standard deviation; SDS, Severity of Dependence Scale.

Table 13 shows whether there were differences in the baseline characteristics of clients who were abstaining from their principal drug of concern or had reduced their days of use by at least 50% at their most recent progress interview, and clients who had not reduced their use to these levels. There were no statistically significant differences between these clients in demographic characteristics, baseline use of principal drug of concern and severity of dependence, injecting drug use and psychosocial wellbeing.

Correlations were also examined between change in days of use of the principal drug of concern from baseline with change in scores on measures of psychosocial wellbeing from baseline. For psychological distress (K10), change in days of substance use was positively associated with change in K10 scores at session 4 (r=.38, p<.001) and session 8 (r=.28, p<.001) but not at session 12 (r=.24, p=.10). This means that fewer days of use of the principal drug of concern was associated with lower levels of psychological distress.

For the quality of life measure (EUROHIS-QOL-8), change in days of use of the principal drug of concern was negatively associated with change in QOL scores at session 4 (r=-.27, p<.001), session 8 (r=-.29, p<.001) and session 12 (r=-.39, p=.007). This means that fewer days of use of the principal drug of concern was associated with better quality of life.

Table 13. Baseline sample characteristics of ACON clients associated with abstinence or at least 50% reduction in days of use of principal drug of concern since baseline at last completed progress interview

	Abstinent or reduced		Test	p-value
	No	Yes	statistic	
	(n=73)	(n=87)		
Demographic characteristics				
Mean age (SD)	38.4 (10.8)	37.9 (10.7)	0.32	.75
Gender, n (%)			1.03	.60
Male	59 (80.8)	74 (85.1)		
Female	9 (12.3)	10 (11.5)		
Non-binary	5 (6.8)	3 (3.4)		
Identify as gay/lesbian, n (%)	61 (83.6)	78 (89.7)	1.29	.26
Born in Australia, n (%)	54 (74.0)	58 (66.7)	1.01	.32
Paid employment, n (%)	50 (68.5)	60 (69.0)	0.004	.95
Live in rented/owned accommodation, n (%)	65 (89.0)	80 (92.0)	0.39	.53
HIV-positive (self-report), n (%)	16 (21.9)	26 (29.9)	2.06	.36
Use of principal drug of concern				
Median days used past 4 weeks (IQR)	8 (3-22)	7 (1-15)	1.79	.07
Mean SDS score (SD)	8.3 (3.0)	7.5 (3.7)	1.37	.17
Injecting drug use in past 3 months				
Any injecting	23 (31.5)	29 (33.3)	0.06	.81
Receptive sharing needle/syringe	1 (1.4)	5 (5.7)	-	.22
Shared other injecting equipment	4 (5.5)	5 (5.7)	-	1.00
Baseline psychosocial wellbeing				
Mean K10 score (SD)	27.8 (7.4)	27.9 (7.9)	-0.13	.90
Mean EUROHIS-QOL-8 score (SD)	3.1 (0.7)	3.0 (0.8)	0.25	.80
Median duration of treatment in days (IQR)	178.5 (131-259)	175 (82-243)	1.09	.28

EUROHIS-QOL-8, WHO Quality of Life Instrument-Abbreviated Version (8-item); IQR, interquartile range; K10, Kessler Psychological Distress Scale; SD, standard deviation; SDS, Severity of Dependence Scale.

Discussion

In this retrospective analysis of treatment outcomes among clients of ACON's Substance Support Service, clients reported reductions in the use of their principal drug of concern and in their severity of substance dependence. The median days of use reduced from eight days in the previous four weeks at treatment entry to four days at counselling session four, and was sustained at these reduced levels at sessions eight and 12. The proportion of ACON clients reporting abstinence from their principal drug of concern increased from 14% at treatment entry to 28% at session four and 39% at session 12.

ACON clients also reported reductions in psychological distress and improvements in quality of life. Improvements in psychosocial wellbeing and changes in substance use were moderately correlated. Three-quarters of ACON clients reported high or very high psychological distress at treatment entry, and women reported higher levels of distress than men. This is consistent with the high rates of distress reported in community samples of lesbian, bisexual and queer women in Sydney (Mooney-Somers et al., 2019), but inconsistent with the comparable levels of psychological distress on the K10 reported between women (mean=20) and men (mean=19) in Private Lives 2, a national online survey of LGBTI people (Leonard et al., 2012).

The majority of ACON clients were gay and bisexual men (79%); the most common drugs of concern were methamphetamine (58%) and alcohol (26%), and the median duration of treatment was 112 days. This is somewhat different to national data on alcohol and other drug counselling, in which a lower proportion of clients were men (66%), alcohol (47%) was the most common principal drug of concern, followed by methamphetamine (21%), and clients were retained in treatment for 57 days on average (Australian Institute of Health and Welfare, 2018a). While our findings suggested that longer treatment duration was associated with better outcomes, the findings should be considered in light of the high proportion of clients lost to follow-up at each progress interview, which included both individuals who had completed treatment and had left without notice. However, baseline substance use and psychological distress did not predict treatment attrition; many clients may have benefited from up to three sessions, but were not retained long enough to complete a progress interview. For methamphetamine treatment, previous research has shown that as few as two to four sessions of cognitive behavioural therapy is associated with reductions in use and improved wellbeing (Lee & Rawson, 2008), while longer duration of treatment using integrated approaches and a range of therapeutic modalities are "increasingly recognised to yield an enduring additive, synergistic effect" (Grigg et al., 2018, p. 48). Due to heterogeneity in study populations, interventions, outcomes and follow-up periods, comparison of treatment outcomes between ACON's Substance Support Service and other research is limited to a small number of studies, typically clinical trials with gay and bisexual men. In addition, national treatment data in Australia does not report on treatment outcomes other than retention (Australian Institute of Health and Welfare, 2018a). In a randomised controlled trial of psychosocial interventions for methamphetamine use among gay and bisexual men in the USA, 80% of men in a tailored gay-specific cognitive behavioural therapy condition reported abstinence after 16 weeks of treatment, and the average days of methamphetamine use in the previous month reduced from 10 to 3 (Shoptaw et al., 2005). In a systematic review of alcohol interventions for men who have sex with men, which included five studies, none reported treatment outcomes that could be compared with those in the current evaluation (Wray et al., 2016). We were unable to find any suitable studies that reported on similar outcomes among women or trans and gender diverse people.

ACON clients who were seeking treatment for alcohol reported a reduction in their median days of use from 20 to 10 days between treatment entry and the fourth counselling session, although this was not statistically significant. This could be due to a number of contributing factors, including the smaller sample size of alcohol clients. Different clients may also have different treatment goals in terms of abstinence or reduction. In addition, stepped care approaches are recommended in national alcohol treatment guidelines, and clients with more severe alcohol use disorders often benefit from more intensive, longer-term treatment that could include, for example, both psychosocial interventions and pharmacotherapies (Haber, Lintzeris, Proude, & Lopatko, 2009). It is unlikely that the higher proportion of women seeking treatment for alcohol influenced

these findings, as the absolute number of male clients seeking treatment for alcohol remained higher. In addition, while a review found that women are less likely to enter substance use treatment overall, they report no differences from men in retention and outcomes once in treatment (Greenfield et al., 2007). While mental health comorbidities are associated with poorer treatment outcomes and ACON's female clients reported greater psychological distress at treatment entry than male clients, women generally report better outcomes in alcohol treatment compared to men (Adamson, Sellman, & Frampton, 2009; Najt, Fusar-Poli, & Brambilla, 2011).

The client distribution of ACON's Substance Support Service suggests lower engagement of women, bisexual people, and transgender and gender diverse people compared with gay, cisqender men. Community surveys of lesbian, bisexual and queer women in Sydney have reported that these women are more likely to seek help for their substance use from a counsellor or psychologist (71%) or a GP (53%) than from a LGBTI-service (12%) (Mooney-Somers et al., 2019). In contrast to our findings, a survey of Australian adults found that bisexual participants were more likely to have sought treatment for substance use in the previous 12 months compared to lesbian and gay participants (7% vs. 1%), although this was a relatively small, online study and it was unclear which services they had accessed (Loi, Lea, & Howard, 2017). To our knowledge, there is currently no available data about substance use treatment access among transgender and gender diverse people in Australia. It is possible that some women, bisexual people, and transgender and gender diverse people see ACON as focused on gay men and HIV prevention given its history as an HIV/AIDS organisation. ACON plans to improve service access for women, bisexual and trans and gender diverse people through Pivot Point, an online portal which provide information about ACON's AOD services, drug information and self-assessment tools, as well as information about other services (https://pivotpoint.org.au). In addition, the recently released Blueprint for Improving the Health & Wellbeing of the Trans & Gender Diverse Community in NSW is guiding ACON's work with trans and gender diverse people to improve service engagement (ACON, 2019).

Injecting drug use was commonly reported among ACON clients (34% in the three months preceding treatment), which is primarily due to the high proportion of clients seeking support for methamphetamine use. However, the proportion of methamphetamine clients reporting injecting as their preferred route of administration was lower than in our pilot study using Substance Support Service data from 2012-14, in which 58% of gay male clients preferred injecting methamphetamine and 32% smoking (Lea et al., 2017). In the Flux study, an ongoing online cohort study of drug use among gay and bisexual men in Australia, most injecting drug use by gay and bisexual men (over 90%) involves methamphetamine (Bui et al., 2018). At the population level in Australia, LGB people are also more likely to report injecting than heterosexual people (Roxburgh et al., 2016), which supports the higher rates of injecting at baseline among ACON clients compared to mainstream clients. While it was an encouraging outcome that there were reductions in rates of injecting and sharing needles, syringes and other equipment during treatment, clients were asked to reflect on the previous three months, so at session four in particular responses could reflect pre-treatment injecting and not capture injecting practices since starting treatment.

The comparison of baseline characteristics of ACON and mainstream clients revealed very different client groups in terms of sociodemographic characteristics, referral pathways, patterns of substance use, and psychosocial wellbeing. ACON clients were more likely to report stable employment and accommodation, and were more likely to have self-referred into treatment (85% vs. 26%). Half of mainstream clients were referred from the criminal justice system or a residential rehabilitation service, compared to just 2% of ACON clients. These findings are consistent with ACON's early intervention model and primary focus on self-referral as opposed to mandated clients. However, the small number of referrals to ACON from residential services could also reflect that sexual identity data is generally not collected from these services, so referral to a LGBTI-specific service such as ACON may not be considered by clinicians. In addition, some LGBTI clients accessing mainstream services may be reluctant to disclose their sexual and gender identity due to concerns about potential stigma and discrimination from service providers (Bonvicini & Perlin, 2003; Cochran, Peavy, & Robohm, 2007). However, in a study of LGB people in Sydney who used methamphetamine, 90%

of participants reported feeling comfortable discussing their sexual identity in mainstream AOD treatment settings (Matheson et al., 2010).

Consistent with previous research comparing the characteristics of LGBTI and non-LGBTI people entering substance use treatment, ACON clients reported more severe substance dependence and greater psychological distress at baseline compared to clients of mainstream services (Cochran & Cauce, 2006; Flentje et al., 2014; Flentje, Heck, & Sorensen, 2015; Green & Feinstein, 2012). This may in part reflect that less than half of mainstream clients reported use of their principal drug of concern in the four weeks preceding treatment entry, compared to 85% of ACON clients (i.e. more ACON clients were experiencing the effects of their principal drug of concern upon entry to treatment than mainstream clients). However, the high proportion of mainstream clients reporting no use of their principal drug of concern could reflect underreporting due to fear of reprisal due to engagement with the criminal justice system or having achieved abstinence already in a residential treatment program.

We had planned to compare ACON and mainstream clients on drug use and psychosocial outcomes during treatment, but the stark differences in substance use at treatment entry and different referral pathways meant that we decided that these were not comparable groups. In addition, propensity score matching and the sample size considerations at each follow-up meant that generating a subset of matched clients between the two groups was not possible. The wide disparities between the sociodemographic and drug use characteristics, as well as referral pathways of ACON and mainstream clients may suggest that mainstream services are not providing AOD counselling services that are appealing for many LGBTI people who self-refer into treatment. Supporting this, the mainstream services reported only five LGB clients and one non-binary client in the three-year evaluation period. However, almost one-quarter of mainstream clients had no sexual identity recorded, which may indicate both an underreporting of LGB clients as well as ongoing barriers among some clinicians to ask clients about their sexual identity. It may also be a reflection of LGB clients choosing not to disclose their sexual identity at mainstream services. As sexual identity questions were only introduced in the NADAbase in 2016, this suggests that there is further work to be done with services in encouraging more thorough data collection.

In terms of other AOD services available for LGBTI people in NSW, S-Check provides LGBTI-inclusive assessment and brief intervention for psychostimulant use at St. Vincent's Hospital, which has been shown to be accessible and acceptable to clients, and has good retention (Brener et al., 2018). The apparent lack of LGBTI clients accessing mainstream AOD services (or LGBTI clients not reporting or being asked about their sexual and gender identity) in this evaluation suggests a need for the provision of LGBTI inclusivity training at these services, which is something that can be provided by ACON, the National LGBTI Health Alliance, and LGBTI organisations in other states and territories². Alternative approaches could include the provision of AOD services within sexual health services (Bourne et al., 2015; Hopwood, Lea, & Aggleton, 2015, women's health services, and services for trans and gender diverse people, as well as individual training of interested GPs and psychotherapists. ACON has recently launched a peer-led rapid testing service for HIV and other sexually transmissible infections to provide trans and gender diverse people easier access to sexual health services. This will also serve as a referral pathway into the Substance Support Service for individuals concerned about their substance use.

² Inclusivity training is offered by various LGBTI organisations, and typically includes education about the lived experience of LGBTI people, how this impacts on health and wellbeing, and how health and social services can provide culturally appropriate, accessible and relevant care for LGBTI people (see https://lgbtihealth.org.au/trainingpackages/ or https://www.pridetraining.org.au).

Overall, ACON is doing well in routinely collecting COMS data from their clients for the NADAbase. While we recognise that services and clinicians are busy and often under-resourced, mainstream services could benefit from additional support in maintaining good quality data collection. While we understand that some clinicians may be reluctant to ask clients about their sexual (or gender) identity because of concerns about offending clients, in a previous study with clients of mainstream AOD services in Sydney, no participants among the predominantly heterosexual sample (79%) objected to being asked about sexual identity (Lea, Bryant, & Treloar, 2016). To improve data collected by COMS, NADA could consider changing the timeframe for injecting-related questions collected at progress interview during treatment to the previous four weeks rather than the previous three months. In addition, it would be beneficial to introduce new questions about mental health diagnoses and treatment, substance use treatment history, and sexual risk practices. While questions on blood-borne virus testing, status and treatment are included, these data were not well collected in the NADAbase, and data on HIV status had to be drawn from ACON's bespoke data for their clients. Encouraging collection of COMS data from clients who leave treatment prior to scheduled progress interviews could also be considered, as well as the follow-up of clients after treatment (e.g. three or six months post-treatment).

Conclusions

The quantitative phase of this evaluation builds on a pilot study conducted on methamphetamine treatment outcomes among gay men attending ACON's Substance Support Service (Lea et al., 2017). This evaluation benefits from improved data collection at ACON since the pilot evaluation, and expands and extends on this research to include all LGBTI clients seeking treatment at ACON, all principal drugs of concern, and sub-analyses for methamphetamine and alcohol clients. Engagement in treatment at ACON was associated with increased rates of abstinence and reduced days of substance use, reduced dependence, and improved psychological wellbeing and perceived quality of life. More than half of the clients were gay men seeking treatment for methamphetamine, and ACON has already committed to better promote the service to other groups within LGBTI communities, including women, bisexual people, and trans and gender diverse people. The evaluation also demonstrated that clients of mainstream AOD counselling services in Sydney represent a different population to ACON's Substance Support Service, with different sociodemographic characteristics, referral pathways into treatment, and drug use practices. The very small number of LGBTI clients attending the mainstream services included in the evaluation suggests that these services may not be appealing or accessible for LGBTI people, or LGBTI people who attend those services do not disclose their sexual or gender identities, or are not asked about them.

Qualitative Findings

This section describes the qualitative component of the evaluation, which comprised in-depth interviews with three groups: i) LGBTI clients of ACON's Substance Support Service (n=22), ii) LGBTI clients of mainstream AOD counselling services (n=12) and iii) professional stakeholders including counsellors and other staff working at the Substance Support Service, experts from community-based HIV and drug user organisations, senior clinicians, researchers and policy makers (n=18).

Methods

Interviews were conducted between September 2018 and May 2019. Client interviews (n=34) included former and current clients of the Substance Support Service (n=22), and LGBTI people who were not ACON clients but who had experience of a variety of mainstream AOD services (n=12), including counselling, 12-step programs (e.g. Alcoholics Anonymous and Narcotics Anonymous), residential rehabilitation (private or public), detoxification services, opioid substitution treatment and stimulant clinics. Numerous participants had undertaken a variety of AOD treatments. All participants were aged 18 years and over. Interviews explored the experience of treatment and how being LGBTI shaped the experience of treatment and therapeutic relationships. Interviews also examined treatment expectations, satisfaction, benefits and limitations of services, and how ACON's service and AOD services for LGBTI in general could be improved.

Interviews were also conducted with 18 professional stakeholders, including six ACON staff (Substance Support Service counsellors and managers, and other ACON staff who work with the service), and 12 externally-based professionals. External professionals were experts from community-based HIV organisations, drug user and drug treatment NGOs, clinicians, researchers and policy makers. Interviews examined perceptions and experiences of ACON and other services, challenges providing AOD services for LGBTI people, and suggestions to improve services, based on their professional expertise.

ACON clients were notified of the evaluation by Substance Support Service counsellors who gave a brief introduction to the study. Counsellors were trained by UNSW researchers to minimise perceived or actual coercion for clients to participate. Clients were invited to take part by approaching the researchers directly via email or telephone to ensure recruitment was voluntary. Former clients who had completed treatment in the previous six months were emailed a flyer about the study, which included an invitation to participate in the research. Interested parties were asked to contact the researchers via email or telephone. Counsellors were not involved in the recruitment process to avoid perceived or actual coercion for clients to participate in the study, and to maintain a boundary between their treatment and this evaluation. LGBTI people who were not ACON clients were recruited via ACON's social media (e.g. Facebook posts) and newsletters. The aim was to recruit LGBTI people who had current or prior experience of outpatient AOD counselling at mainstream services.

Prior to the recruitment of external professionals, the CEOs of target organisations were contacted for approval and information purposes. A list of key professionals was generated by ACON in consultation with the advisory group and forwarded to the researchers, who then contacted these professionals directly via email. Follow-up emails were sent once if there was no response to the initial contact. Key additional stakeholders were also recommended by participations during the process of interviewing.

It is important to note that government organisations could not be contacted to facilitate the recruitment of client or stakeholder participants due to the requirement for ethical approval from each Local Health District where a service was located. Some of these services are important referral pathways for clients to access ACON's Substance Support Service.

Potential client and professional participants were asked to reply directly to the researchers. These recruits were emailed an information sheet and consent form, then a time and date was set for the interview. After the information and consent protocols were discussed and clarified, participants were interviewed either face-to-face or by telephone, as per their preference. Interviews lasted between 30 minutes and one hour. All interviews were audio-recorded and began with a brief verbal consent process, which was in addition to the full written consent. Audio files were transcribed verbatim by a professional transcriber, then checked, corrected and made non-identifiable by the interviewer. At this time, pseudonyms replaced names, and the raw data was archived at CSRH, as per our ethics protocols.

As this study was a service evaluation, with internal staff included in the dataset, we undertook an additional measure to protect the confidentiality of ACON staff who were interviewed. Signifiers for any interview excerpt use pseudonyms and are referred to as either "ACON staff" or an "external professional". Interviews with ACON clients focused on their AOD treatment history, their treatment experiences and satisfaction with AOD services at ACON and elsewhere, whether they had used any other ACON services, if they knew of other services for substance use among LGBTI people, and whether they felt that LGBTI-specific AOD services were beneficial. Interviews with clients of mainstream AOD services included questions about their AOD treatment history, what AOD services they had attended and whether they had been satisfied with these services, if they were aware of ACON's Substance Support Service and other LGBTI-specific AOD services, and whether they felt that LGBTI-specific AOD services were beneficial.

Staff and stakeholder interviews focused on the following areas: their role and involvement in the AOD sector, involvement with ACON's Substance Support Service, their experiences of either working at or with ACON's Substance Support Service, perceived benefits and limitations of the service, the role of mainstream services in providing AOD treatment for LGBTI people, their perceptions of the AOD treatment needs of LGBTI people, and the benefits or limitations of LGBTI-specific AOD services.

Qualitative data were managed using NVivo software, and adopted a thematic approach to analysis (Maguire & Delahunt, 2017; Clark & Braun, 2013; Braun & Clark, 2006). Guided by the questions in the interview schedules, transcripts were read and re-read to generate labels (or codes). This enabled the researchers to make sense of large amounts of complex data. Codes were used to collate interview excerpts relating to these various topics, which were then grouped into themes, including points of consensus and dissonance. As such, analysis used a combination of inductive (data-driven) and deductive (analyst-driven) approaches, that is: the first round of codes were guided by the research questions; and a second set of codes were generated during analysis which reflected unforeseen findings. The second phase of coding and verification was supported by the work of Thorne (2009). Called Interpretive Description, the approach uses contextual and experiential wisdom to interpret findings for applications and practical settings. Using the team's foreknowledge of the issues at hand, an interpretive approach to thematic analysis retains the grounded nature of analysis which seeks findings in the data, but is less concerned with theory development so enables a focus on workforce and policy development. Verification of these findings occurred during development of the coding frame, and throughout the report drafting process, when the analysis was checked by the broader research team. To check the salience and relevance of the findings for practitioners, input was then sought from the broader team, including key personnel at ACON.

Client interviews

Participant profile

Characteristics of client participants are shown in Table 14. The majority of client participants were gay, cisgender men, aged 40-50 years old and of white / Anglo-Australian cultural backgrounds. Methamphetamine and alcohol were the most commonly reported principal drugs of concern.

Table 14. Characteristics of client interview participants

	ACON	Mainstream	All participants
	(n=22)	(n=12)	(n=34)
Gender			
Transgender woman	3 (13.6)	-	3 (8.8)
Transgender man	1 (4.5)	-	1 (2.9)
Cisgender woman	1 (4.5)	2 (16.7)	3 (8.8)
Cisgender man	16 (72.7)	7 (58.3)	23 (67.6)
Non-binary gender	1 (4.5)	2 (16.7)	3 (8.8)
Gender non-conforming	-	1 (8.3)	1 (2.9)
Sexual identity ^a			
Lesbian	3 (13.6)	2 (16.7)	5 (14.7)
Gay	16 (72.7)	7 (58.3)	23 (67.6)
Bisexual	1 (4.5)	1 (8.3)	2 (5.9)
Queer	2 (9.1)	1 (8.3)	3 (8.8)
Ethnic and cultural background			
White / Anglo-Australian	15 (68.2)	8 (66.7)	23 (67.6)
Aboriginal	2 (9.1)	1 (8.3)	3 (8.8)
Other background	5 (22.7)	3 (25.0)	8 (23.5)
Principal drug of concern			
Methamphetamine	9 (40.9)	4 (33.3)	13 (38.2)
Alcohol	6 (27.3)	3 (25.0)	9 (26.5)
Cannabis	2 (9.1)	2 (16.7)	4 (11.8)
Heroin	-	1 (8.3)	1 (2.9)
Prescription medications	-	1 (8.3)	1 (2.9)
Polydrug use	5 (22.7)	1 (8.3)	6 (17.6)
HIV positive	6 (27.3)	1 (8.3)	7 (20.6)
Hepatitis C positive	4 (18.2)	2 (16.7)	6 (17.6)
Education ^a			
University degree	10 (45.5)	4 (33.3)	16 (47.1)
Vocational training	2 (9.1)	5 (41.7)	7 (20.6)
High school	7 (31.8)	1 (8.3)	8 (23.5)
Accommodation			
Renting	9 (40.9)	10 (83.3)	19 (55.9)
Home owners	5 (22.7)	2 (16.7)	7 (20.6)
Renting government housing	3 (13.6)	-	3 (8.8)
Other arrangement	4 (18.2)	-	4 (11.8)
Employment ^a			
Unemployed	3 (14.3)	3 (33.3)	6 (20.0)
Paid employment	12 (57.1)	5 (55.6)	17 (56.7)
Student	1 (4.8)	1 (11.1)	2 (6.7)
Pension / other benefit	5 (23.8)	-	5 (16.7)

a Missing data not reported.

In what follows, we present interview excerpts to describe how these participants found or accessed their support service; how they experienced the service; how being LGBTI affected choices in help seeking, and any suggestions they had to improve service provision. In each subsection, we compare the experiences of clients of ACON's service with clients of mainstream services, including points of consensus and difference. For each interview excerpt presented, the client's pseudonym, age group, gender and principal drug of concern are reported.

Client journeys to support

Clients accessing ACON's Substance Support Service tended to find ACON's services via promotion on social media, internet searches and word of mouth. These participants had generally deliberately sought out ACON. Others had been directed by health care providers who had recommended targeted support to complement or replace the treatment they had received at mainstream AOD services. Bill (40s, cisgender man, polysubstance use) had difficulty recalling how he found ACON's service, but described how his life felt out of control and he was "desperate" when he saw promotional material about ACON on social media: "I think I was so desperate and so mad, I think I might have, maybe I saw something on Facebook or something?". Similarly, Shane (30s, cisgender man, alcohol) had noticed ACON's promotional material on his Facebook newsfeed, and put this down to algorithms that Facebook use which seem to have pushed the Substance Support Service's material to the forefront of his profile:

I am pretty sure it came up on a Facebook feed and obviously you know how Facebook monitors everything you do, obviously I have been looking at Antabuse, I have been looking at treatments, AA meetings and various things, but ACON consistently comes up and various things comes up in my newsfeed... It popped up!

Campbell (40s, cisgender man, methamphetamine) also remembered feeling that his drug use was escalating. He was proactive and used the internet to do "a little bit of research to find out where I could go for [targeted] counselling" and found ACON's services. Similarly, Dawn (20s, non-binary, polysubstance use) remembered feeling that their mental health was "worsening" and had received negative feedback from friends about their recent behaviour when intoxicated. The positive reputation of ACON among Dawn's community networks and friends bolstered their motivation to seek help, as did the ease of referral and that the service was free of charge:

It was worsening, my depression, it was like hangover days and scat days were like real bad and also the amount of money I was spending on it and probably the biggest thing was that a couple of my friends said, "you really messed up yesterday or last night when you were drunk" and so I had to ...I realised that once I was apologising consistently, like regularly apologising, that I should just stop apologising and stop doing what I was doing... ACON has a really good reputation and [...] there was a Facebook targeted ad, it was free, that was a big part of it, there wasn't that much set-up, like I think I submitted a form, which didn't have that much questions, then they gave me a ring and then they set up the interviews, the appointments, so it was really easy as well to get it all sorted.

Interviewees were often reassured by ACON's positive reputation among their friends and word of mouth recommendations appeared to be a common referral pathway. Others had already accessed support at ACON for other needs such as sexual health or HIV testing and felt comfortable there. Ian (40s, cisgender man, methamphetamine) remembered that he "knew ACON and I rang up and I took their intake". James (30s, cisgender man, methamphetamine and alcohol) was already using ACON for support with living with HIV, and was unwilling to go to a mainstream service in case he had to disclose this information during the counselling process. He was pleased to find that ACON had an AOD counselling service that he could use:

I just searched on the ACON website just to see a bit more about what's to offer for me being HIV-positive and then I sort of came across the substance thing on the website.

Among those who had not found the service via self-referral, some had been encouraged to attend by health care providers in hospitals or residential rehabilitation services. This referral to ACON was perceived as beneficial, as the treatment they were receiving in mainstream services prior to this referral was "not fitting" them. Connor (20s, cisgender man, methamphetamine) had a positive experience and was appreciative of this targeted referral:

I was hospitalized at [public hospital in Sydney], doing my treatment program and it didn't really fit with me and then someone mentioned ACON and I was like, "okay cool, I'll hit them up" [...] they were saying "you know, with you being gay you might kind of get more support and something that's more tailored to you at ACON" and I did.

Similarly, Lachlan (20s, cisgender man, polysubstance use) was at a community-based AOD service in Sydney and was encouraged to use ACON when he left residential treatment. Mitchell (40s, cisgender man, methamphetamine) was directed to ACON by his GP, whom he trusted. Kendall (40s, trans woman, polysubstance use) was accessing support for other concerns at the Gender Centre but this service does not provide AOD-specific programs. She was encouraged by the staff to use ACON's Substance Support Service as it was able to offer AOD support, while also being inclusive of LGBTI people.

For ACON's clients, accessing tailored, inclusive treatment for LGBTI people was a priority, for both themselves and for the healthcare providers who made the recommendation. Clients who self-referred themselves into treatment had found ACON via internet searches, social media platforms or word-of-mouth recommendations by friends and intimate partners. In terms of client journeys to ACON's Substance Support Service, participants remembered feeling that their AOD use, and its negative outcomes, were escalating at the time of their help-seeking. As such, the ease of intake, the lack of fees and the speed with which they received their appointment were particularly valued.

Like the ACON clients we interviewed for this study, participants accessing mainstream services often had trouble remembering how they came to find their service due to feeling distressed or "out of control" at the time. At times their memory of how they found their service was patchy. For example, Ro (50s, non-binary, alcohol) remembered:

Walking out of AA [Alcoholics Anonymous], and I remember - I might have even done a Google search for some treatment facilities. I was prepared to put myself into a facility full-time [...] but I found an outpatient facility.

Similar to the ACON clients we interviewed, these participants often had received feedback that their negative behaviours were escalating. Rae (30s, cisgender woman, heroin) was given an ultimatum by her partner who said she: "couldn't do this anymore. "After having trouble finding a local service, Rae found a: "free service through the community health centre up in [a regional area]... I called a direct line because I wanted to get into rehab because I had had a massive lapse." Participants that had been referred to treatment by a healthcare provider were generally not offered tailored and inclusive LGBTI support, or felt they had been restricted in their treatment choices. For example, Jarrah (20s, cisgender woman, cannabis) was treated via a WorkCover Treatment Plan³ and had to use the providers specified on that list. Eamon (50s, cisgender man, cannabis) could not remember how he came to access a specialist AOD service, but thinks a counsellor he was seeing for other purposes may have made the referral. Aidan (30s, cisgender man, methamphetamine) had to access support at short notice due to criminal justice issues and was referred to treatment by a probation and parole professional. In this instance, his sexual identity was not a consideration for the referral: "it never came up." While there were similarities between the client journeys of ACON clients and LGBTI clients of mainstream services, through using internet searches or professional referral pathways, clients of mainstream services did not seem to place the same significance as ACON clients on finding services that

³ WorkCover is a national insurance scheme which covers employers for the cost of benefits should an employee become injured within the workplace.

would understand or embrace their gender and/or sexual identity. At the early stages of help seeking, these participants did not think of accessing inclusive, targeted services for LGBTI people, and seemed to place emphasis on finding a robust service to address their AOD use. They were also largely satisfied with the service they had received and did not feel motivated to replace this with a more targeted service.

While these participants were aware of ACON to varying degrees through promotional material at LGBTI events or social media platforms, their perception was that the main focus of ACON was HIV prevention, and therefore it was unlikely to be relevant to their AOD problem. Rae (30s, cisgender woman, heroin) knew of ACON but did not think to contact them for her AOD issues. Jarrah (20s, cisgender woman, cannabis) did not find out about ACON until she started studying a diploma in community services, and expressed the view that ACON was "a service for people at risk of or living with HIV/AIDS". Eamon (50s, cisgender man, cannabis) was aware of ACON, and had accessed its services, but did not think to contact them for substance support. He also shared the perception that the service was primarily focused on HIV prevention:

I've known of ACON since it formed basically around HIV education and prevention, so but yeah I mean back then I don't know, we didn't have Facebook or yeah there was less awareness of ACON's diversity of services. Like I've been to a couple of ACON ... I don't know what are they called meetings or whatever around PrEP [HIV pre-exposure prophylaxis], so that was more recent, but that's a different kettle of fish.

Other mainstream clients had, by chance, accessed counselling with a LGBTI clinician, and perceived this to meet their needs for inclusive treatment. Rae (20s, cisgender woman, heroin) was pleased that the counsellor she accessed through a mainstream service was "a lesbian which is great!". Others, like Jaxxon (20s, non-binary, polysubstance use) had found counsellors who had undertaken LGBTI inclusivity training and were satisfied with the service they received. Having said this, Jaxxon was only comfortable talking about their sexuality, but kept their gender identity "under the rug" as they did not feel ready to disclose or discuss this with their AOD counsellors. Other participants had accessed a range of AOD services over a long period of time, and were satisfied with the support they had received, so did not feel the need to change their provider or approach ACON for additional support:

I don't think I have used ACON much at all really when I think about it. My main support was the [department within a hospital]. They were very good to me. I was there for about a decade and then I did about three or four inpatient rehabs. I did 12-Step program. I did SMART Recovery. (Brian, 40s, cisgender man, methamphetamine)

At the time of the interview Brian had started accessing another service provided by ACON for another, non-AOD-related issue. Unlike the other participants, Duncan (40s, cisgender man, methamphetamine) had not heard of ACON or the Substance Support Service and would have "tried it had I known". He was at his local GP practice when he found the flyer for a mainstream service in the waiting room. Compared to ACON clients who were interviewed for this study, participants using mainstream services were less likely to know of ACON and had not deliberately sought out LGBTI-inclusive services. Similar to the ACON clients, they felt their problematic AOD use had been escalating at the time of their help seeking, and they may have been prompted to seek help by advice or ultimatums from significant people in their life. They had, however, focused their attention on accessing AOD services and had not considered trying to find a service that was LGBTI-specific. They were also generally satisfied with the service they had received and had not been motivated to change it, even in instances when they had chosen not to disclose parts of their identity or experience. Awareness and knowledge of ACON seems to have been the biggest difference between the two cohorts, and mainstream participants did not report being recommended to ACON by friends, or referred by service providers, or having seen the Substance Support Service's promotional materials. Their perception was that ACON was an HIV prevention service and not relevant for AOD support. In the next section, we focus on client accounts of service experiences and again compare and contrast the accounts of ACON clients and those accessing support at mainstream services.

Service experiences

Both client cohorts remembered their initial clinical experiences as tumultuous and challenging. ACON clients felt that overcoming problematic AOD use was difficult, but they felt supported and seemed to have gained skills that they continued to use. Bill (40s, cisgender man, polysubstance use) remembered his initial sessions as confronting and at times this led to more substance use:

I just found it all so confronting with when you start to speak to someone about your stuff if you never have before, you can objectively see how unwell you are and that used to just freak me out and I would just go out and use more.

Despite the shock he experienced starting AOD treatment, Bill remained engaged in the process and felt he had gained greater awareness and mindfulness which he used to manage his use: "I got a lot of skills out of it. Here was the first time I ever heard about being present or being mindful or so, I did get a lot of very basic skills out of it.". For Karl (50s, cisgender man, methamphetamine), it was a "humbling experience" but he felt that ACON had "done a good job" and he enjoyed being "pushed out of my comfort zones". George (40s, cisgender man, methamphetamine) also had a positive experience and, like Bill and Karl, valued the skills he learnt during his sessions:

The service is good. I have seen different counsellors over time and they all have been very helpful and supportive. And you know I will always keep it real with them, they always give you tips and tools to manage and help you improve and to help you work on craving similar stuff like that...

Similarly, Kent (40s, cisgender man, methamphetamine) described his ACON counsellor as "approachable and I can talk to her about absolutely anything". In contrast to George and Karl, however, Bill was not always honest with his counsellor ("keep[ing] it real") and tended to avoid talking about his sexual activity, e.g. "how many men I slept with at the sauna over the weekend". Dawn (20s, non-binary, polysubstance use) in contrast, felt they could be really honest about all the aspects of their experience, including stigmatised activities. In addition to the resources and skills gained, Dawn enjoyed attending counselling at a "queer friendly" service that overtly avoided judgments about mental illness, sex work or substance use:

[My counsellor] gives me a lot of resources, like would give me podcasts and links to things, so it's an ongoing thing [to be supported between sessions], rather than go in and then go out. They ... I really like the reception staff and the fact that it's such a queer friendly office, like I don't feel awkward being in the ... like waiting for my therapy appointment [...] like with the stigma of mental health, and addictions...[...] I tell all my friends to come here. The counsellors have good knowledge about LGBT issues. It's good.

Dawn also appreciated being able to cancel appointments without incurring a fee. Ian (40s, cisgender man, methamphetamine), like Dawn, had a positive experience at ACON. He appreciated working on his issues with methamphetamine use, but also the comorbidities that affected his relapse prevention. He said:

It was good. It reinforced my resolve ... They gave me some practical advice in the first couple of weeks and I took that on board and I started doing that and that's when like I think week 4 or week 5 my counsellor [...] said let's deal with the depression, so I think they were thinking that the depression is probably what was leading me falling back into the trap of sticking a pin in my fucking arm again.

Josh (30s, cisgender man, polysubstance use), like other participants, also enjoyed ACON's "holistic approach" as well as the welcoming reception. He said:

When you come into ACON, because it's a holistic centre for services, I don't know, it just feels better and then the rooms are a bit more designed for sort of having a conversation versus it being a sterile environment, and I feel like when I walk up to the reception counter and, there are all sorts of different people that are in ACON, I feel more like I am coming to a place which is servicing my community, so that's why I like it.

For other participants, experiences at ACON were more mixed. Connor (20s, cisgender man, methamphetamine) enjoyed the "location and comfortable counselling spaces" but disliked running into former sexual partners "in the corridor which is awkward". Like Dawn, however, Connor felt that the knowledge of counselling staff at the service was good—"I would say 10/10". James (30s, cisgender man, methamphetamine and alcohol) also perceived the LGBTI community to be small, "even in Sydney", and while he could not fault the service, he had concerns about confidentiality and he feared "running into people in the corridor". He said:

There hasn't actually been anything really negative to be honest. The only thing I guess that I was a bit hesitant about was being sort of like Sydney scene and everything is quite small, like being seen there, [...] it kind of freaks me out, gives me anxiety to bump into somebody who may be in the building, [like employees too]. [...] are they going to find out, are they going to see my file, are they going to, you know?

This perception was shared by other participants, but concern about bumping into peers was not unanimous: "I went there (ACON) for a sexual health check and there was someone there I knew doing a check... we're a small community but yeah it doesn't bother me" (Heath, 30s, trans man, alcohol). Overall, client accounts of ACON's Substance Support Service were positive. Participants struggled to describe negative aspects of the service. Indeed, Kendall (40s, trans woman, polysubstance use) described the service as "professional" and "discreet" and in humour said: "perhaps a glass of water would have been nice!". Given the emphasis that ACON clients placed on locating a tailored service that was non-judgemental about their sexual practices or substance use, participants felt that ACON's service had met their needs. Negative experiences tended to be related to the challenging nature of behaviour change and talking therapies, or the risk of meeting peers while attending appointments, rather than the quality of care. ACON could use these findings to make access more discreet, however this could be difficult to achieve with the community-facing nature of the organisation. While clients of all ACON services use the same reception area in the Sydney office, counselling rooms are on a separate level of the building with secure access. For clients who have reported concerns around being recognised while attending the service, alternative arrangements such as late appointments or telephone/online counselling are typically offered.

As noted before, clients who were accessing mainstream services tended to have different priorities than ACON clients, and did not report a motivation to access tailored LGBTI services. For clients accessing mainstream services, the emphasis was on the degree of support they needed, rather than the inclusivity of the setting. For Ro (50s, non-binary, alcohol), who had parenting responsibilities, the need to balance their need for intensive treatment with other responsibilities was the priority. Having thought that residential rehabilitation would be their only treatment option, it was with relief that they found a full-time outpatient clinic. In describing this treatment episode, Ro lamented the challenges of managing an addiction using an outpatient program. This seemed to be a greater concern than the risk of discrimination or exclusion:

So I think for the day sessions would be a whole day ... 6 hours. The night sessions were about 4 hours straight. Start at 4 and then finish at 9pm with a break or yeah. [...] even you know 10 years ago, what was problematic for people struggling with addiction is that addiction is 24/7, it's not Monday to Friday night 9 to 5pm, so you can only access these services to assist you in business hours you know which is one of the biggest failings.

Ro's satisfaction with this service was high. When asked what they liked about it, they said:

I liked the education or information that they gave me as to the reasons for my addiction to alcohol [...] they talked a lot about previous traumas [...] I was in active addiction to alcohol, I had a very toxic relationship with my dad when I was young and I was still very, very angry with him at the time and that particular experience and looking at life development ... so they are educating us on like development.

Similarly, Hamish (30s, cisgender man, methamphetamine) was satisfied with all three mainstream AOD services he had used. He said:

Well, it was pretty awesome because when I went there [...] to turn my life around, I had to get rid of everybody who I knew through the drugs, and the people there, I found them pretty good, like a good support network for me and I made a lot of good friends there and I am actually working there now. My counsellor kept visiting me in jail, and he said to me that he saw a lot of potential in me and told me to do this course, which I have just finished and so now I am actually working there.

For Jarrah (20s, cisgender woman, cannabis), who had been referred to her psychologist through WorkCover, she did not expect to experience negative treatment due to her sexuality and so seeking out an inclusive service had not been a priority. While she felt her service goals had been met, she was disappointed in the way her clinicians had responded to her sexual identity:

Initially when I had a WorkCover psychologist he was extremely dismissive in relation to like my identity and stuff like that, just treated me like horribly. He was like a 90-year-old man... it was just really bizarre, but then I only saw this guy like a few times, then when I went to the guy who was bulk billing me [...] I really was appreciative of the services he was giving me [...] but they were both like old men that just had pretty much no idea, had their lives and their general life and haven't looked outside the box so I definitely would never refer any of my friends on to them ever even though he bulk billed me and he was such a blessing, at the same time he was such a burden because I was in such a fragile place. He was a burden to my mental health.

For Jarrah, finding low-cost psychological services had been a priority at the outset, but through experience she had come to perceive this as less important than being respected and understood by health care providers. Indeed, rather than helping her, she perceived that these psychologists had been a risk to her mental health. Ultimately, Jarrah was satisfied with the treatment she received, in that her original AOD goals were met, but had also learnt the importance of an inclusive service provider whose non-judgemental and knowledgeable approach would be less likely to cause harm related to her sexual identity. In this instance, Jarrah perceived the age difference between her and her psychologists as causing the fissure.

Brian (40s, cisgender man, methamphetamine) had only recently started seeing an ACON counsellor (not at the Substance Support Service) at the time of the interview, and he did not feel the need to access a LGBTI-specific service for his AOD issues, but sought out ACON for relationship support. He said:

I am seeing this guy now but that's more for relationship dramas, not so much drugs, it's more personal stuff, but I would say you know probably the reason I went is probably because I needed someone that really understood gay men, gay issues and I just think, it depends on where you are at with your sexuality. If you are really comfortable, having someone who is gay is not essential, if you are young and really shy and you are using, [...] then it's probably really good to have someone that's gay or understanding of gay issues and that's probably where ACON is probably very good.

Participants accessing mainstream services raised other intersectional considerations. For example, our sample included participants who deliberately avoided ACON's services due to the perception that they did "not fit in" there. Danny (40s, gender non-conforming, polysubstance use) said:

I don't feel comfortable at ACON.... I just see ACON as a very white male led organisation and here ... I still feel I have to qualify what I am about to say, but I don't have to. ACON is a very white male led organisation that does very little for black Aboriginal women... or people of colour, we feel incredibly isolated.

Indeed, Danny would like to be consulted should ACON wish to be more inclusive of their communities:

If ACON is serious about providing health services to Indigenous people, particularly Indigenous women or Indigenous transwomen, we feel they don't fit in any of ACON's boxes in any way, consult with us, we know what's going on, talk to us and I know they tried Internet and stuff like that, but.

Antonio (30s, cisgender man, alcohol), who had not accessed ACON's Substance Support Service, expressed a preference for a "gay counsellor" and was prepared to pay for this instead of settle for a counsellor randomly assigned to him in a mainstream service. He said:

I prefer to see a gay one, through work you could see a free one, but that's luck of the draw, so I had to pay for mine privately, which is annoying but I guess it's a good investment... I Googled it, "gay counsellor Sydney" and then two or three popped up, but it's hard to you know shop around because when you shop around, you have to give them a go, like one or two sessions, tell them about the problems again from scratch and then ... but then do you see a gay counsellor from your background or your age group, at what point do you know, draw the line?

If Antonio had been aware of the free service offered at ACON, he might have accessed substance support there. The theme of luck emerged in other accounts. Rae (20s, cisgender woman, cannabis) described chance reactions when disclosing to her health care providers who were either knowledgeable or shared her sexual identity:

I've got a really great heterosexual male GP at the moment, his sister is an ex-addict, she's a lesbian with really bad mental health issues... So I just hit the jackpot with him! [...] And it took me like six or seven months before I disclosed [to my AOD counsellor] and it was really hard hearing her refer to my partner as a male. But I just didn't really feel comfortable and I didn't know at that point she was a lesbian... Because I finally came out to her [...] and then she goes, well, "You know, I'm actually a lesbian, so there's no judgement here".

Danny (40s, gender non-conforming, polysubstance use) perceived the attitudes and motivations of health professionals to be influential in their skills with working with different clients. They felt that if a professional had a passion for their work, and was committed to doing no harm, then their approach would be safe and relevant:

Passion. And if he is not marked by someone's gender or sexuality... And if they got it right and if they are truly practicing the Hippocratic oath, in as much as do no harm, then they are doing the right thing, then definitely.

Duncan (30s, cisgender man, methamphetamine) had noticed some inclusive visual material in the waiting room of the mainstream service he was attending and felt welcome: "Yeah, like in the waiting room at [the place I get AOD support] and they have a bit of gay/lesbian material up on the walls, so I feel more comfortable".

Compared to ACON clients, clients of mainstream services seemed to be ambivalent about the need to access inclusive services, or had other intersectional considerations that affected their choices. Others only sought out or considered a LGBTI-specific service after negative experiences with mainstream services. Having said this, they tended to be satisfied with the AOD interventions they had received at mainstream services. Others had accessed ACON for other services, such as HIV prevention or relationship support. Overall, the non-ACON cohort did not describe many negative experiences with mainstream services. The biggest difference seemed to be in relation to disclosure (of gender and sexuality). For participants accessing ACON's services, disclosure was implied (and expected) by their attendance. For those accessing mainstream services, they made decisions about when and whether to disclose, and reactions to disclosure were mixed. In the next section, we build on this and describe client accounts of their lived experiences as LGBTI people, and how this had, or had not, affected their choice of AOD service.

Participants' broader experiences of being LGBTI and effects on help-seeking

So far, we have presented client accounts which highlight the importance of knowledgeable and non-judgmental staff, and the ways in which participants used digital mechanisms and community recommendations to access inclusive support. In this section, we build on these themes and explore the ways in which LGBTI identities and experiences were described and how this affected help-seeking. Some participants were concerned about potential discrimination related to their gender or sexual identity, and perceived that this stigma had contributed to poorer mental health. Indeed, some participants felt they would only be welcome at services like ACON. Difficult experiences in the 1980s and 1990s seemed to have affected their outlook on social services and what they needed from an AOD intervention:

A colleague said, "maybe you might at some stage you know want to contact [ACON] if your depression gets too bad" and whatever, because there's no one else that's going to want to listen to you, well especially back then, this is years ago. You know, we were so hated ... I mean, yeah, well we still are, but people just hide it better now. (Shell, ACON client, 40s, cisgender woman, alcohol)

Like Shell, Ivy (ACON client, 70s, trans woman, polysubstance use) also felt that it was harder in the past, and this had affected her outlook on life and the services she chose—"I have sort of come to terms with the stigma [associated with my sexuality]. Yeah, it's always been hard, like you know in my early days at school". Lewis (ACON client, 50s, cisgender man, alcohol) came out as gay in the 1980s and had negative experiences which he felt had impacted his quality of life. He perceived this as something that should be factored in to any counselling or support with LGBTI people:

I identified as a gay teenager, but back in the early '80s, it was still a crime and family pressure and everything, so I tried to conform so I pushed that under the carpet... one of those sorts of stories that you hear. Married a person that I didn't want to marry ...then I hit 50 and I felt like my life had come to nothing. There's a lot of pain I think sometimes in our community.

Aidan (mainstream client, 30s, cisgender man, methamphetamine) also spent time reflecting on how he had come to accept himself over time. In contrast to Lewis, however, this negated his need for tailored LGBTI services. He said:

I tried covering up my sexuality to try and fit in and you know that only last for so long and then I was comfortable enough to essentially not so much come out but talk to my friends who I was close with there and say, "look, this is the real me."... It was great...there was a lot of fear and anxiety around how I was going to be received because in my mind I was like, "I need them to love me", because I didn't even know how to love myself.

While Eamon (mainstream client, 50s, cisgender man, cannabis) understood that persisting negative social attitudes towards LGBTI people can be harmful, he felt less of a need to access LGBTI-specific services. Indeed, he expressed satisfaction at how quickly social attitudes had changed and did not feel the need to seek out LGBTI services:

People in their 50s, who went through the 80s and the 90s, with HIV and the hate crime and all of that, it was like everyone banged on about how bad [it was during the marriage equality survey] and I was like "oh my God!" like I mean sure they're idiotic views but they are so easy to argue against... But everyone thought that in the 80s, like it was the mainstream opinion, that was the opinion in the media, like we were just scum of the earth basically and to see that sort of massive evolution over time ... It's really quite quick evolution in terms of societal attitudes about us... and not something I ever expected when they were throwing us off cliffs, which they literally were in the 80s and the 90s, you know?

Interviews with clients accessing mainstream services, like their ACON counterparts, included stories of discrimination and trauma, as well as stories of self-acceptance and transformation. Unlike ACON clients, however, clients of mainstream services felt that the need for inclusive services was related to age and experience, rather than the risk of discrimination within these service settings, which was perceived to be low. In doing so, they highlighted the relative and implicit factors that altered client perceptions about potential services, and the ways in which these attitudes affected their help seeking. In contrast, shared stories of stigma and discrimination were thought to foster a commonality among ACON participants, who felt that the different members of the LGBTI community had more in common than not, "there are things that are common to all of us and there are things that are slightly different to two guys as opposed to two girls you know what I mean". (Ian, ACON client, 40s, cisgender man, methamphetamine)

While some participants described negative coming out experiences, younger interviewees tended to share stories of acceptance and empowerment, consistent with the perceptions of older participants. For Josh (ACON client, 30s, cisgender man, polysubstance use), the experience of coming out was very positive, and he sought out inclusive spaces as he enjoyed supporting other members of his community, based on this positive experience:

I have been pretty much gay my whole life. I knew that I was different. My parents knew when I was born. I realized I was gay when... I was in year 9 and I was the first person to come out in my high school that I was gay... It was good. It was very good. It was very empowering, because I came out and people followed after. [...] One friend came out after I came out because she felt that I created ... like I spoke up about things that she didn't really hear from anyone else so when she figured out who she was, she came out and felt empowered by my story. So that was very nice because that's sort of who I am.

Age was not the only factor that affected participants' choices. For some, identities related to geography or region were also a consideration. For example, ACON was thought to represent a particular subculture of the gay community and some participants did not feel that they fit in to ACON's "community". Bill (ACON client, 40s, cisgender man, polysubstance use) said:

As a gay guy with HIV that doesn't identify with the scene or camp or fem or any of those things, I kind of feel excluded and I totally understand, there is no malice in what I am saying, I totally understand why all these other people need to be included, but it's starting to feel like I am the odd one out, because I don't have any of these labels. I am just your garden variety gay guy from the country who doesn't really fit, yeah, because I don't fit one of these new trendy little labels, I often feel kind of excluded.

Whether feeling part of ACON's client community or not, ACON clients emphasised the importance of feeling welcomed by tailored LGBTI services. Consistent with interview excerpts presented earlier, the perception that LGBTI-specific services would understand their clients, and adopt a non-judgemental approach to gender and sexual identity was considered important to participants. They chose ACON to avoid judgement, stigma and discrimination during their treatment.

In contrast, the difficulties with accessing mainstream services where evidenced in George's (ACON client, 40s, cisgender man, methamphetamine) negative account of his experience at a sexual health services in a public hospital. He felt judged and fearful as a result of this encounter, and as such, he deliberately avoided mainstream services, where possible:

I had an accident with somebody who was HIV positive and I ran to a Sydney hospital...for a prescription for PEP [post-exposure prophylaxis] and they gave me the prescription, the tablets at the time were horrible, they made you feel really tired and sick. They were not the ones that we have today and their doctor at the time you know he was very judgmental, "how did the accident happen?" and basically he made me feel like "so you sort of deserve this for what you have done" and that was the impression that I got and even the lady when I went to pick up the results [...] I was okay, but he made me scared, I don't know, he was really like, I felt more like you know judged and you know, it was a weird approach to it.

Karl (ACON client, 50s, cisgender man, methamphetamine) also avoided mainstream AOD services as he felt that gay men would not receive appropriate support at "straight AOD services" due to his perception that clinicians at these services lacked knowledge of AOD issues experienced by gay men. Here he explained why he preferred attending a LGBTI-specific service:

It has to be custom made you know, customized, tailor made to the needs. We have our own specific needs okay? This is not to discriminate them but it's just being realistic... interestingly at my work... they have actually different sessions for gays and it drew me to [better understand the] dynamics behind addictions and sexual practices is different from the [...] straight world, it's different and the driving force behind it, they are so different.

Brian (40s, cisgender man, methamphetamine), who had only accessed mainstream services, also felt that LGBTI-specific services were better at addressing the needs of LGBTI people. He felt that there is a need for LGBTI-specific residential services, and that public residential rehabilitation services tended to be unsuitable for gay men:

I always thought that they need a rehab just for gay people... a lot of these private rehabs are good, but you know they are a bit more relaxed, a bit more comfortable but the public rehabs can be a bit harsh and I think what happens is that they can be quite intimidating to a lot of gay men, like I went to one at (removed for confidentiality) and it's full on, it's hardcore, you know you are coming down trying to do all this stuff and they are pretty intense. If someone could come up with a gay rehab I think they could make a lot of money.

Based on his previous experiences, Kent (ACON client, 40s, cisgender man, methamphetamine) said he would only use mainstream services if he was in urgent need of support:

If I had to do a mainstream [service] to save my life, yes, I would of course, but I don't think I need to because I have got other services there [at ACON] that are more practical and more beneficial, they are more appropriate.

In addition to avoiding potential experiences of stigma and discrimination at mainstream services, ACON clients valued feeling understood and that LGBTI-specific services would be more relevant to their needs. Lewis (ACON client, 50s, cisgender man, alcohol) felt that his, "[sexuality] is a key thing for my issues, yeah". Accessing a LGBTI-specific service was seen as particularly important for clients who wished to explore issues around their substance use that related to their gender or sexual identity.

ACON is more LGBTIQ focused, so I just felt like when I was at [my mainstream service] it was kind of like a lot of people were straight there, so I was kind of like ... yeah, which is fine, but I just needed that support around being gay that I'd never really had in my life and yeah, explore some things and just yeah ... other psychologists, usually they have never been in like a same-sex relationship or anything and they just don't really understand, like there is that connection that I didn't get and could only really get at ACON and yeah, it's just that connection and I really realise that now. (Lachlan, ACON client, 20s, cisgender man, polysubstance use)

Similarly, Mitchell (ACON client, 40s, cisgender man, methamphetamine) reported an adequate experience with a "straight counsellor", but had not returned due to the perception that the counsellor would "miss things". While he appreciated the fresh perspective this counsellor offered, the overall experience was alienating and the disadvantages outweighed the benefits:

I didn't want to go back to the last guy because he was a straight counsellor and the issues that I was talking to him about, it was kind of like ... it was very alien to him ... and there's nothing wrong with having another perspective, like a straight perspective on your own circumstances and that can actually be ... it could be useful, like I'm not sort of arguing against it, but I think ... because I've had enough alienation in my life, it's kind of relief just to go somewhere where those straight questions ... the questions from a straight guy are not asked.

On the other hand, Eamon (50s, cisgender man, cannabis) reported being satisfied with the mainstream service he had accessed, and unlike Mitchell had not used a LGBTI-specific service. Despite this largely positive perspective, he did note that he also felt that "straight professionals might miss things" and would like to access targeted support in the future:

The woman, the counsellor was wonderful I recall like she was very helpful, not at all homophobic and she actually offered a lot of help in terms of just dealing with what had happened and so they are helping me, not smoke pot... I could be totally open, which was wonderful you know and that's what you want... nowadays I possibly would go to a gay and lesbian specific counsellor, perhaps and not out of anything negative, but more out of just a full understanding of the issues that we all have to go through you know?

As with previous sections, these findings suggest that there is interplay between LGBTI experiences and service choices, and these were affected by clients' perceptions of common histories and understandings. Indeed, people who valued or needed the solidarity of a shared history were more likely to seek out or value LGBTI-specific services. Having experienced alienation with a heterosexual counsellor, Mitchell welcomed the sense of belonging he experienced with a counsellor who identified as gay. Clients' experiences of violence and harassment as a result of their gender or sexuality were seen as important for counsellors to understand, and some participants doubted that "straight counsellors" or mainstream services could meet this need. For Shannia (ACON client, 40s, trans woman, alcohol):

Having an LGBTQ counsellor is very important. It takes a lot of courage being where I am and where I live. I'm experiencing a hell of a lot of conflict from my Christian neighbours to the point where I can't park my vehicle on or around my property anymore.

Shell (ACON client, 40s, cisgender woman, alcohol) had a similar sense that support services for LGBTI clients should explore issues of societal and structural violence within counselling sessions:

Is it important to seek out LGBTQ clinicians? Definitely, because this is the thing... look no problem with straight people, but they don't have a friggin' clue about what we go through and especially people of my generation, like [my counsellor] gets it too. She used to go to pubs and clubs and police used to go in there and beat the living shit out of us, strip search us, literally strip search, humiliate us as much as they could [...] that used to be a common occurrence for people like myself and [my counsellor] knows all about it too. That in itself has created trauma obviously... No shrink or bloody psychologist or frigging counsellor of any other sort, who is straight, is ever going to understand that.

In contrast, Heath (ACON client, 30s, trans man, alcohol) was less motivated to seek out LGBTI-specific services—"I am pretty open to like other services that aren't targeted at queer; I mean, half of my friends are hetero like everything doesn't have to be queer for me, I just want the help". He did, however, enjoy the service at ACON because of the level of understanding and knowledge demonstrated by their staff—"my counsellor kind of knows what's going on, like I don't have to explain or like educate people […] it's just easier". Similarly, Ian (ACON client, 40s, cisgender man, methamphetamine) was less inclined to avoid mainstream services and took a strategic approach to help seeking based on his particular needs or problem:

I'm sort of glad that I chose a mainstream GP, like one thing is that when you are HIV-positive and I know that there are so many HIV guys that are now working and getting on with their life, which is what I'm looking at doing next...I don't want my entire life to become involved around my condition...when it's specific to HIV, I will use ACON, BGF [Bobby Goldsmith Foundation] and Positive Life [NSW service for people living with HIV], but if it's just about living life in general, then I will use a normal GP, I will go to a normal chemist.

However, ACON clients tended to avoid mainstream services for AOD issues. Kent (40s, cisgender man, methamphetamine) perceived that mainstream health services lacked knowledge and lived experience of LGBTI people, as well as not being patient-centred:

I wouldn't talk about a lot of things because there are a lot of things I would omit from a conversation and I would have to filter myself and that's not being of benefit to anybody if I went to a straight ...mainstream service, because they are opinionated, they are uneducated [...] the medical centres are just pathetic right, they['re] just completely fucking useless [...]. They don't understand anything, they pump you in, pump you out, just to get funds.

Based on previous experiences of stigma and discrimination, ACON clients valued attending an AOD service that felt relevant, safe and knowledgeable. Even those who had not experienced stigma and discrimination tended to value the sense of community and commonality they experienced at ACON. Indeed, there were clients who actively avoided mainstream services after having experienced negative interventions or fearing that they would. Some clients were concerned about the attitudes of clinicians in mainstream services towards LGBTI people, and whether they had received training in or were knowledgable about AOD issues experienced by these communities. This speaks to the therapeutic working alliance fostered by ACON counsellors and these participants, who are perceived to hold high levels of knowledge about the community as well as better attitudes and motivation towards their work.

In this section, we have presented findings which outline the complex and diverse influences that affect clients' decisions in seeking support. Past experiences of stigma and discrimination impact on the choices clients make about where to access support, particularly among clients accessing ACON services. Clients of mainstream services were more ambivalent about the need to access inclusive support. However, there were participants who, based on their experiences at mainstream services, reported being more likely to seek support from a LGBTI-specific service in the future. In the next section, we focus on participants' perceptions of how AOD services could be improved for LGBTI people.

Improving AOD services for LGBTI people

In the closing section of each interview, participants were invited to share their perceptions of what would improve service provision, both at ACON's Substance Support Service and more broadly. Given the generally positive appraisal that ACON clients had of their treatment, these participants most commonly suggested that ACON should maintain the level and quality of their current services. However, some clients had specific suggestions to improve ACON's AOD services. Dawn (ACON client, 20s, non-binary, polysubstance use), for example, wanted more than 12 sessions—"with the limited amount of appointments, it's like ... addiction goes on for years, like it can be really ... I mean I guess you can have 10 a year or something". Similarly, Lachlan (20s, cisgender man, polysubstance use) also wanted "more than 10 sessions, but I know there is always kind of restraints around these things". This was understood to be due to "low resources", and these participants felt that increasing funding for ongoing AOD support would be beneficial. Other clients preferred to have their appointments provided at a regular time and found it hard to attend when sessions are offered at different times—"I want it structured because I am a shift person and you know I have got plans, okay? It messes me around" (Karl, ACON client, 50s, cisgender man, methamphetamine).

In addition to increasing the limit on the number of sessions, some participants thought that there was an opportunity for ACON to offer group programs or social events for AOD clients. While it was appreciated that there are group programs for LGBTI people in Sydney outside of ACON, such as Rainbow Recovery, participants perceived that one-off events or group programs would be valuable for increasing their network of peers who are sober or abstaining.

A concern raised by some ACON clients was confidentiality and anonymity at ACON, as some participants were worried that they would be recognised by other clients or staff when attending the service. Mainstream service clients, on the other hand wanted services to have more visible LGBTI signage and materials. For mainstream services, clients suggested that more visible "signage" and other materials that identified the service as LGBTI-inclusive would both make them feel more comfortable and welcome. Hamish (30s, cisgender man, methamphetamine) said:

I think maybe having some sort of like ... I know some of these places have like flags or like the Aboriginal flag and stuff like that, may be have like a rainbow flag to just show a bit of like yeah ... it would just look a bit better... I think they did eventually put a flag up on the door but the other places, they don't seem to. That's not to say that they don't have like gay people rights in mind but yeah, it was just that, if I saw their flags, I would have felt a bit better.

Aidan (30s, cisgender man, methamphetamine) suggested that if there were available resources, ACON should "ramp it up" and provide a broader range of AOD services. While he was supportive of the services provided by ACON, he felt that LGBTI people with more severe problems with AOD use should go to a residential rehabilitation facility, whereas those in recovery should access ACON's tailored LGBTI services. In short, Aidan approached decision making by balancing the intensity or severity of need for AOD issues against the need for inclusivity.

Discussion

In summary, participants who had accessed ACON's Substance Support Service were generally very satisfied with the service they had received. These participants were motivated to access a LGBTI service because they felt it would more likely meet their needs for both AOD and LGBTI identity issues, and were reassured by the positive reputation of ACON among their friends. For many clients, sexuality and/or gender were central or very important aspects of their lives, which likely influenced their decision to seek support at ACON.

Participants who had accessed support from mainstream services tended not consider accessing LGBTI-specific or LGBTI-inclusive services, and were more concerned with finding a good quality, supportive service to address their AOD use. These participants were mostly satisfied with the service they had received. While these participants were aware of ACON to varying degrees, their general perception was that ACON was focused on HIV prevention and did not offer AOD services. For some of these clients, being LGBTI may have been less central to their overall identity, which may have resulted in a preference for a more compartmentalised approach to accessing AOD support, in which being LGBTI was not necessarily raised in their treatment.

Unsurprisingly, perceived and enacted stigma related to sexual and gender identity was stressful for participants and contributed to poorer mental health. Interviews with clients accessing mainstream services, like their ACON counterparts, included experiences of discrimination and trauma, as well as experiences of self-acceptance and transformation. Unlike ACON clients, however, clients of mainstream services felt that the need for LGBTI-inclusive services was related to age and past experiences, rather than the likelihood of encountering discrimination at mainstream services, which they perceived to be uncommon.

Age was not the only factor that affected participants' choices. For some, living in a regional area created a barrier to accessing AOD services or limited choices about what services were available. Others did not feel that they fit in to ACON's "metro community". While client satisfaction with services offered at mainstream services was generally high, participants expressed concerns that clinicians would not understand them, or might miss things. Past experiences of stigma and discrimination affected choices clients made about where to access support and this was certainly the case of clients accessing ACON's service. Clients in mainstream services were more ambivalent about the need to access inclusive support, and focused on the importance of AOD intervention and the level of support needed. Nevertheless, there were participants who, based on their experiences at mainstream services, would more likely seek out support in a service for LGBTI people in the future.

In terms of suggestions to improve the service, ACON clients were generally satisfied and most often suggested that the service continued in its current form. Clients of mainstream services said that they would be more likely to access ACON's Substance Support Service if the service was able to minimise the likelihood of clients being recognised by other clients and staff, being more inclusive of Aboriginal clients,

and undertaking promotional activities to alter the community perception that ACON was only focused on HIV prevention. At mainstream AOD services, participants reported that they would like to see more visual signifiers that services were LGBTI-inclusive and that staff were knowledgable of AOD issues specific to LGBTI people.

Professional stakeholder interviews

Participant profiles

Eighteen professional stakeholders were interviewed between August 2018 and May 2019. Three were counsellors or other staff of ACON's Substance Support Service, three were staff of other ACON services, and 12 were external stakeholders (e.g. clinicians, managers, and administrators). Nine participants identified as cisgender women, seven as cisgender men, one participant as gender-queer, and one identified as a transgender man. Participants identified as lesbian or gay (n=8), heterosexual (n=6) and queer (n=4). Professional participants worked in a wide range of roles, including: counsellors both at ACON's Substance Support Service and in other ACON services (n=6), psychology/social work (n=2), casework (n=4), management (n=2), outreach (n=1), in an executive role (n=2) and research (n=1). Ten professional participants had direct client contact at the time of their interview and were in a position to refer clients to ACON's Substance Support Service. Participants ranged in age from 25 to 61 years. The majority of these participants had worked in their current role more than five years, and some for long periods of time (up to 25 years).

Staff and stakeholder accounts of ACON's Substance Support Service

Professionals interviewed for this study tended to view a tailored service as beneficial for LGBTI people requiring support for substance use, and this was reported by both professionals who worked at the Substance Support Service and those who were externally based. Participants also saw the value of providing services for LGBTI clients at mainstream AOD services, as long as professionals had adequate training to meet the unique needs of LGBTI clients. Nevertheless, participants expressed doubts as to the extent to which mainstream services could currently meet these needs. Staff who worked in mainstream services and who also identified as LGBTI described undertaking activities to improve the inclusion of LGBTI clients at their services, but that doing this in addition to their usual work was "exhausting". In addition, professionals who identified as LGBTI expressed concerns about referring clients to services who had not undertaken LGBTI inclusivity training, and had no programs or policies regarding LGBTI clients.

Participants tended to talk at length about the particular needs of LGBTI people accessing AOD services, and what would be needed to improve the treatment currently provided by mainstream services. Both ACON staff and external professionals talked about the impact that treatment had on clients, such as brokering connections to other health and social services, reductions in harmful AOD use, and improved quality of life. External professionals tended to express low levels of knowledge about the Substance Support Service although they were aware of ACON. As such, these participants described a need to improve promotion of the service within the AOD sector. ACON's general communication and promotional strategies were viewed as robust by these participants, and hence participants felt that ACON could do more to raise the profile of the Substance Support Service, and improve its profile to appeal to underserviced cohorts within LGBTI communities. In order to improve awareness and potential referrals to the service, most interviewees recommended a multi-pronged awareness raising campaign within the NSW AOD sector, such as an increase in its social media profile and more frequent in-service presentations at referring services.

The following major themes were identified in analysing the interview transcripts of professional participants, and these are examined in further detail below: i) perceptions and experiences of ACON's Substance Support Service; ii) substance use and service needs of LGBTI people; iii) aims, outcomes and impacts of ACON's Substance Support Service; and iv) perceptions about how the service could be improved.

Perceptions and experiences of ACON's Substance Support Service

The Substance Support Service was not known among some of the external professionals interviewed in this study although ACON itself was well known. For example, George who had worked in the AOD sector for many years said:

I don't know the program. I mean I've sat on interview panels with ACON. You know, for the counselling team and the short-term case management team that they have, but I'm not sure that ... have they changed the name? Because they're always restructuring in ACON, you know, and I'm not sure.

ACON was thought to be "very well-known and respected within the LGBTI community" (Bobbie, external professional), and many had attended ACON's capacity building workshops or training events. Knowledge about ACON's AOD programs, however, appeared to be minimal.

For internal staff, the holistic approach adopted at ACON was valued. They were able to meet their clients' needs by working within an organisation that offered a range of services for LGBTI people. They described working with clients with multiple, intersecting needs, and a trauma-informed approach was considered important. One ACON staff member said:

Trauma, and I mean, we are lucky in as much our particular service has a care coordination team, so the social, financial, legal aspects that come up for people [can be managed]. We have a lot of internal support, and that's fortunate because the services that we have in here... it's working across managing all of those things and how they impact on someone's substance use. (Marion, ACON staff member)

Marion valued the cross-department collaboration between ACON's other services and the Substance Support Service, and described the benefits this had for LGBTI clients, particularly those who had complex presentations. Marion's quote also highlights the benefits of co-locating services and the improved coordination of care that can be provided at a LGBTI-specific service. Other participants felt that inclusivity meant that ACON was able to attract hard-to-engage clients. Tiernan (external professional) felt he was able to direct friends and associates to the Substance Support Service who might otherwise be difficult to engage—"I do refer quite a lot of people. I think the kind of people that I am referring to are a bit hard to find and pin down for counselling, because they are in a bit of chaos".

Similarly, Renee, an externally-based clinician, felt positive good about referring clients to the service. For those affected by multiple challenges, experiencing ignorant or homophobic / transphobic service responses was thought to be particularly taxing:

I get misgendered all the time [laughs]. All the time. I can't go to an airport and be called 'she'. I just can't. I'm just 'sir'. I'm not 'ma'am'. You know? And that's okay, like I'm okay, but for somebody who's struggling with AOD use, who's struggling with mental health, who has a low socioeconomic status, has not been loved at the really important years in their life...

Drawing on her own experiences, Renee appreciated not having to worry about the ways in which ACON's services might treat her clients. In particular, those who she felt were vulnerable. In doing so, she highlighted some of the tensions which LGBTI staff experience in their work, including managing her own experiences of misgendering or homophobia, and worrying about what her vulnerable clients might experience. These interview excerpts also highlighted the need to improve the safety of LGBTI people within mainstream AOD services, through training in the provision of LGBTI-inclusive services and discouraging homophobic and transphobic incidents with other clients. Simply providing information to mainstream services about LGBTI issues within a one-day workshop was considered by some stakeholders to be inadequate:

This specialty is very important to the [LGBTI] community, in that the people can go to a service where they feel understood about the issues for them and that they feel safe there and I think in particular that's what that service represents to the community. (Annabel, external professional)

Professional participants who were aware of the Substance Support Service valued the level of knowledge and awareness that ACON's clinicians had about LGBTI communities, and their ability to understand the history of trauma and multiple needs that some clients bring. Being located within ACON was also considered to be beneficial to the clients and staff, who could refer them to other departments to have clients' additional needs met. Having a comprehensive knowledge of diverse gender and sexual identities was highly appreciated by referring staff, who did not have to worry that vulnerable clients might be offended or distressed by misgendering or ignorance on top of their current challenges. Indeed, participants who knew about it tended to view ACON's Substance Support Service as being able to attract and engage hard-to-reach clients who would not otherwise gain formal support for managing their substance use.

Substance use and service needs of LGBTI people

In building on the previous section, we now shift our attention to broader perceptions of the AOD treatment needs of LGBTI people, and the role that mainstream services might play in this. So far, we have described participant accounts of the potential additional complexities when working with LGBTI people, these being: minority stress, historical trauma associated with sexual and gender identity, and the risk of misgendering clients or making misinformed assumptions about sexual practices. Despite these concerns, participants felt that there was a role for mainstream AOD services in working with LGBTI clients, as long as they received adequate inclusivity training to do so. An ACON professional, who worked in another department, said:

We cannot service the whole LGB community in NSW, we cannot do it. We don't have enough. We need mainstream services to jump on board, but I think the only time we should allow them to jump on board is if they've had pride diversity training [provided by ACON]. (Bob, external professional)

LGBTI-specific AOD services were thought to be rare—"it's unique and the only service in New South Wales that responds to LGBTI people with alcohol and other drug issues" (Harry, external professional). As such, interviewees considered that mainstream services could do more to meet the needs of LGBTI people. Inclusivity training was thought to be fundamental to mainstream services who undertake this work. However, mainstream services that had not undertaken inclusivity training were perceived as failing to fully acknowledge the particular needs of LGBTI clients. Indeed, many participants reported that mainstream services did not typically ask clients about their gender and sexual identity at intake, which limits the quality of available data about LGBTI people using mainstream services. This affected Renee who said—"It is erasing. The erasure of our people is awful". Other participants had had experiences with friends and clients who felt that some clinicians at mainstream services overemphasised gender and sexual identity and sexual practices in ways that were not culturally sensitive:

I have certainly said that we need to be really conscious about one of the problems with mainstreaming. Anecdotally, I've heard people talking about going to mainstream therapists and counsellors, generic ones, and that they are obsessed about sexuality and like: "that's not why I am here!". (Cora, ACON staff member)

Knowledge, awareness and training were perceived as a requirement for staff who work with LGBTI people. However, workforce development was thought to be only one aspect of increasing the role that mainstream AOD services play in working with LGBTI people. Participants felt that these services could do more to attract and engage LGBTI clients by promoting their services as LGBTI-inclusive and highlighting the training their staff have undertaken. Jason, who worked in another LGBTI health service, did not think that mainstream AOD services could meet the needs of LGBTI people. If individual services had improved their capacity to provide inclusive services for LGBTI people, he wanted mainstream services to provide updates to the sector about these developments via cross-agency updates or email newsletters. He said:

I don't know ... like I am not sure if [mainstream services] are but I also don't know that they definitely ... they may well have to deal with a lot of LGBT in which case they might actually already have strategies and policies ..., this is me guessing yeah, but in a way guessing is because if I am thinking that, then that

means they are not marketing the fact that they are inclusive or they are diversified, in which case I have a perception which whether it's true or not, nothing has been changed, [they've] done to change that perception.

Renee (external professional) reiterated that the provision of LGBTI-inclusive services needed to be taken up by all members of the mainstream organisation, and that too often it was LGBTI people working within the service who carried the burden of this work. She said:

It needs to somehow become the responsibility of the service, not the gay people in the service, to show how and why it's important, and that the onus needs to be shared amongst our straight or heterosexual or cisgendered counterparts because we're exhausted.

Highlighting the needs of LGBTI people attending AOD services, participants described the benefits of tailored services whose staff understood and were non-judgemental towards their relationships and sexual and drug use practices. Given the limited number of LGBTI-specific AOD services in NSW (and Australia), participants felt that these services did not have the capacity to meet the needs of everyone within LGBTI communities. As such, it was considered necessary to build the capacity of mainstream AOD services to provide inclusive care to LGBTI people, improving their knowledge and awareness of issues related to sexual and gender minority identities so that they may better meet the needs of these clients. More than just undertaking inclusivity training, this work takes time and experience to build competence and confidence with ongoing support from specialist LGBTI organisations. In addition to time and experience, participants thought that mainstream services could promote their services as LGBTI-inclusive so that potential clients and their referring professionals felt comfortable directing work there. Finally, some participants reported that LGBTI professionals should not be burdened in improving the inclusivity of the workplace, and this responsibility would be better shared by the entire workforce. This had the potential to help prevent burnout among LGBTI staff across these services.

Aims, outcomes and impacts of ACON's Substance Support Service

As described above, external professionals who were aware of ACON's Substance Support Service also knew about the service's treatment model and aims. One interviewee described the aims of the service in the following way:

My understanding of it [is] as potentially a brief intervention of six to eight counselling sessions for members of the LGBTI community including their loved ones ... who experience alcohol and other drug issues. That also has a component of care coordination and aftercare and looking at, you know, referrals, the service that a person might need. My understanding of the model itself is very much around brief intervention, equipping the person with, you know, self-management skills. (Bobbie, external professional)

This description of the service reflected the perceptions of other externally-based professionals. Interviewees who had referred clients to the service had received good feedback from clients. Bob said "almost everyone that I've spoken to [about the Substance Support Service] have said, "the service and the counselling has been amazing, it's really helped me"." Internal staff felt that high levels of client retention was indicative of client satisfaction—"It is a good sign and we have a lot of clients who are repeat trade" (Marion, ACON staff member).

ACON was perceived to be well known among LGBTI communities, and potential clients were thought to trust the various services and programs that they offered. This was seen to benefit the Substance Support Service:

They have a really robust and effective community engagement strategy for marketing all of their programs. So, that awareness and understanding within the local LGBTI community should be there and I think the benefit is the ACON name. People know and trust it. (Bobbie, external professional)

Participants also valued the capacity building work that ACON had undertaken, and most of the professionals we interviewed had undertaken some form of in-service inclusivity training provided by ACON. The Substance Support Service was thought to be particularly good at meeting the specific needs of LGBTI people, given that substance use practices were different among LGBTI communities than the broader Australian community. ACON's aim to avoid problematising AOD use or the sexual practices that might accompany some of this use (such as "chemsex" or "party and play") was thought to be a particular strength. One externally based professional, who regularly referred clients to the Substance Support Service, said:

I think there are a couple of really powerful points and there is the client facing work, then there is also like a capacity building work, that the substance support team have been able to participate in through [LGBTI] training. I think having a dedicated queer counselling service that focuses on substance use is really important, but without you know pathologizing the sort of LGBTI experience of drug and alcohol use and I think that they do that quite well, you know there is something really critical about the ways in which queer communities use alcohol and drugs, but also the communities of care that we have in place around supporting our mates as they use drugs in particular, but you know I certainly see in all of the work that I do some you know like lots of people actually using drugs and alcohol are fine even if it's a lot you know, it might not necessarily be impacting their lives, but there are some real pointy ends and if there is something that's been emerging for me in my work about how the substance support team is able to meet the needs of regional clients through Skype or phone counselling in a way that's going to be meaningful. (Tiernan, external professional)

Having a dedicated LGBTI service was viewed as valuable due to its affinity with the informal and peer-based communities of care in place within parts of LGBTI communities. The level of understanding about the lives of LGBTI people, including relationships, sexual practices, drug use, and care-giving dynamics within these communities was thought to strengthen the service, and make it more meaningful and accessible to potential clients.

Stakeholder suggestions for service improvement

Professional participants in this study perceived sector knowledge about ACON's Substance Support Service as low, and that enhanced promotion of the service and inter-agency communication was required to increase referrals:

Not enough people know that it exists. I think that there is a piece of work that is required around adding the service into every health pathway that is published ... so being really strategic about how it's promoted and to whom. I think that would be helpful. (Tiernan, external professional)

Renee (external professional) had only "vague" knowledge "that [ACON] do drug and alcohol counselling." She reported following ACON on social media and felt that most of their content "falls under the health umbrella", but would like to see the "same oomph and pizzazz for their drug and alcohol work". Providing an internal perspective, Cora, an ACON staff member, felt that promotional materials for the Substance Support Service were not attracting women, and that "women don't seem to be showing up at this service". Indeed, there was a perception among all professionals that most clients of ACON's Substance Support Service were gay men and more work needed to be done to attract and engage bisexual and trans and gender diverse clients.

One external professional, Bob, who regularly referred clients to ACON, felt that some intake procedures could be improved, such as ensuring a "quick turnaround" between intake and seeing a counsellor, and doing intake on Wednesdays:

I find that a lot of people have massive weekends, they stop maybe Monday afternoon, Tuesday they feel like shit, Wednesday is the first day they resurface, but they don't do intake on Wednesdays. [The person who does the intake] is not here on Wednesdays.

ACON staff felt that improvements could be made with more funding and longer-term funding cycles. ACON staff said that they would like to provide a more comprehensive set of services in addition to individual counselling, including aftercare and group programs. Marion said:

I think it would be great if we were able to do some more of that follow-up you know with clients. I think it would be ... you know more money is always helpful you know, sustainable you know kind of funding knowing that it's there for longer than you know 3 years or 12 months or whatever, you know that would be good. I think it would be great if we could have the capacity to you know to run groups, because we don't at the moment and to invest in a development of a group you know sort of therapy program and that I think would probably take a number of years you know as an investment into time and money and developing something that really suited our community.

For external professionals, improving the promotion of the service was identified as the most significant concern. For ACON staff, the Substance Support Service could build on its current services, provide better follow-up of clients following treatment cessation, and develop group programs tailored for specific LGBTI communities and substances (e.g. women, trans and gender diverse people).

Discussion

Professionals interviewed for this study agreed that the availability of tailored services was beneficial for LGBTI people requiring support for their substance use. Participants also saw the value of providing treatment for LGBTI clients at mainstream AOD services, as long as those services were equipped to provide culturally appropriate care for LGBTI people. This could be achieved by services participating in LGBTI inclusivity training in order to better understand and respond to different patterns and contexts of substance use within LGBTI communities. LGBTI inclusivity training is currently available from ACON, who operate an AOD-specific program called Rainbow Buzz, as well as other programs (see https://lgbtihealth.org.au/trainingpackages/ or https://lgbtihealth.org.au/trainingpackages/ for a directory of services). Some interviewees expressed concerns that the provision of AOD treatment to LGBTI clients at mainstream services required an internally-based advocate. These advocates would typically be staff who identified as LGBTI, although some interviewees reported that it was challenging to incorporate this role into existing workloads.

While external participants' overall perceptions of ACON were very positive and they felt that it was a good setting for a specialised AOD counselling service for LGBTI people, some participants thought that the Substance Support Service was not well known by clinicians at mainstream AOD and related services. Most external participants felt that more work was needed to improve awareness of the Substance Support Service among referring professionals and potential clients. However, it is possible that knowledge of the service within the AOD sector was underestimated. Government health services were unable to be interviewed, as ethical approval of the evaluation was required from each Local Health District a service was located in before any staff could participate. Some of these services, particularly those located in inner Sydney, regularly refer clients to the Substance Support Service.

In terms of the query raised by a participant about intake staffing, monitoring of incoming referrals is undertaken by other staff on Wednesdays when the regular intake officer does not work. When high priority referrals are identified via phone or email (e.g. HIV-positive or at risk of suicide), a team member conducts an intake interview the same day.

While ACON's general communications and marketing strategies were viewed as effective in promoting ACON's broader services, external professionals felt that ACON could do more to raise awareness of the Substance Support Service. Professional participants considered that increased promotion would improve the appeal of the Substance Support Service to groups considered not as well serviced by the program (e.g. women, bisexual people, trans and gender diverse people) and better meet the needs of LGBTI people in

NSW. While service promotion could be enhanced, the service is operating at capacity and the quantitative analysis showed that 85% of clients are self-referrals. Additional funding and resources would be required to both promote activities and to meet the increased demand that would likely result from greater promotion of the service.

Cost Analysis

As part of the brief from the NSW Ministry of Health, a cost analysis of the program was requested. The cost analysis is for ACON's Sydney-based Substance Support Service. The analysis covers the 2018-19 financial year period and represents the total cost to the federal government, through the Australian Government Department of Health's Primary Health Network (PHN) funding under the National Ice Action Strategy. Substance Support Service sites in Newcastle and Lismore were not included in this analysis as they were not fully established and operational during the costing study timeframe.

Costs

ACON received \$211,000 (GST exclusive) in government funding for the period 1 July 2018 to 30 June 2019 from two PHNs in Sydney. This staffed 1.4 full-time equivalent (FTE) substance support counsellors (1 full-time and 1 part-time counsellor) and 0.8 FTE Team Leader/Substance Support Counsellor (of which 0.6 FTE is allocated as counselling time). This equates to 2.2 FTE staff in total, including 2.0 FTE counsellors and 0.2 FTE Team Leader. This funding enables clients to access the service for free and represents the total cost to government.

The majority of funding covered staff salaries (80%) and the remaining funding covered program costs (13%), such as learning and development, clinical supervision and service promotion, and administration costs (7%).

Additional costs to run this service that are not covered by PHN funding includes time spent by the intake officer on substance support service intakes, management costs, some promotion and design costs and some administration costs. It is estimated that the shortfall in funding for this service in 2018-19 was \$35,595 (see Table 15).

Table 15. Method of calculating additional costs to ACON in 2018-19

Item	Estimated cost	Method of calculation
Intake officer	\$8,265	The intake officer is employed 15 hours per week at a rate of
		\$48.1643 per hour. Of the 553 intake assessments completed in
		2018-19, 22% were allocated to the substance support service.
		Therefore, substance support intakes account for 3.3 hours per week
		of the intake officer's time, which equates to \$8,264.99 per year.
Management	\$20,000	5% of Manager, Allied Health
costs		5% of Associate Director, Client and Clinical Services
		5% of Director, Community Health and Regional Services
Promotion and	\$1,000	This covers an additional 15 hours per year in total from the ACON's
design		in-house Marketing and Digital Engagement team to design
		promotional material and target
Administration	\$6,330	True administration costs for programs are at least 10% of the total
costs		grant funding. PHN grants limit this line item to 7% of the total grant
		funding. The shortfall is therefore at least 3% of \$211,000.
Total	\$35,595	

Outputs

The following definitions from the NSW Minimum Data Set for Drug and Alcohol Treatment Services (NSW MDS DATS) were used to count outputs:

Occasion of service: the NSW MDS DATS definition of service contact, which PHNs use as the definition of an occasion of service, is contact "made with a client for the purpose of providing a service that results in a dated entry being made in the client's record". Any client contact that does not constitute part of a service (treatment) should not be considered a service contact. The definition excludes contact with the client for administrative purposes, such as arranging an appointment and contact with carers/family members (unless they are a registered client) or other health /community service workers. ACON uses this definition when reporting occasions of service.

Episode of care: the NSW MDS DATS defines a service episode, which PHNs use as the definition of an episode of care, as "a treatment process, with defined dates of commencement and cessation, between a patient/client and a provider or team of providers, provided at the treatment service agency or one of its service delivery outlets, in which there is no major change in the service delivery setting, main service provided or principal drug of concern/gambling and within which there has been no unplanned interval of contact greater than one month".

Over the 2018-19 financial year, the 2.0 FTE counselling staff delivered 998 occasions of service (OOS) to clients of the Substance Support Service, totalling 119 episodes of care. Assuming each episode of care requires one intake assessment, the total number of occasions of service was 1,117. This equates to an average of 9.4 occasions of service per episode of care. Occasions of service for the Substance Support Service grew on average by 13% per quarter over the last 2 financial years.

Costs per output

In 2018-19 ACON's Substance Support Service cost \$1,773.11 per episode of care (or \$188.90 per occasion of service) (see Table 16).

Table 16. Costs to ACON per output for the Substance Support Service

Indicator	2018-19 \$AU dollars	Notes
Average cost per episode of	\$1,773.11	Total funding divided by the total number
care		of episodes of care
Cost per occasion of service	\$188.90	Total funding divided by the total number
(OOS)		of occasions of service

Projected costs and outputs

In 2019-20, ACON's Substance Support Service will continue to be funded by one PHN. This funding will resource 1.8 FTE in total (1.6 FTE counselling staff and 0.2 FTE Team Leader role). This is a reduction of 0.4 FTE counselling role from the previous financial year.

It is projected that the total cost to ACON to run the service will be \$245,415.50 (See Table 17). The primary reason for the increase in service delivery costs is due to salary increases, as a result of the Equal Remuneration Order (ERO)⁴ and standard annual salary increases.

PHN funding will cover 73% of the total cost to run the service. The shortfall is largely because PHN funding has not accounted for the ERO Supplementation and increases in annual salaries above CPI due to a new enterprise agreement.

4 https://www.fairwork.gov.au/pay/minimum-wages/social-and-community-services-industry-pay-rates

ACON anticipates that the service will deliver 1,100 occasions of service in 2019-20. This equates to a total cost of \$223.11 per occasion of service, of which \$162.87 (73%) will be covered by PHN funding. ACON will be covering a shortfall of \$60.24 per occasion of service. This demonstrates that as the FTE decreases, the cost per output of running the service also increases.

Table 17. Projected costs to ACON in 2019-20

Item	Estimated cost	Method of calculation
Intake officer	\$8,265	The intake officer is employed 15 hours per week at a rate of \$48.1643 per hour. Of the 553 intake assessments completed in 2018-19, 22% were allocated to the substance support service. Therefore, substance support intakes account for 3.3 hours per week of the intake officer's time, which equates to \$8,264.99 per year.
0.2 FTE Team leader	\$22,000	
1.6 FTE Substance support counsellors	\$160,000	Staffing costs have increased in line with the new Enterprise Agreement
Staff learning and development (including clinical supervision)	\$7,840	 Fortnightly clinical supervision at \$150 per hour for 1.6 FTE
		 Additional learning and development at approximately \$1,000 per 1.0 FTE
Management costs	\$20,000	5% of Manager, Allied Health
		5% of Associate Director, Client and Clinical Services
		5% of Director, Community Health and Regional Services
Promotion and design	\$5,000	Printing of promotional material
		Paid print advertisements during key periods (e.g. Mardi Gras)
Administration costs (10%)	\$22310.50	True administration costs for programs are at least 10% of the total grant funding. PHN grants limit this line item to 7% of the total grant funding.
Total	\$245,415.50	

Discussion

ACON's Substance Support Service delivered 1,117 occasions of service from July 2018 to June 2019, which equated to \$188.90 per OOS. It is projected that the total costs to ACON to run the service in 2019-20 will be \$245,415.50, of which PHN funding will cover 73%. ACON anticipates that the service is able to deliver 1,100 occasions of service in 2019-20 with each occasion of service costing \$223.11, of which PHN funding will cover \$163.63. ACON will need to cover the shortfall which, over the longer term, is not possible nor sustainable with increasing client demand and operational costs. It also demonstrates how the cost per output of running the service increases as resourcing decreases.

Comparing the cost of ACON's Substance Support Service to other similar services demonstrates that ACON's specialist outpatient counselling service for LGBTI people is competitive and provides excellent value for government funding. For example, recommended fees per 45-60 minute session are \$251 for a psychologist (Australian Psychological Society) and \$240 for a social worker (Australian Association of Social Workers).

The limits of current PHN funding arrangements, which have not kept pace with salary increases and ERO supplementation, has had financial implications on service delivery and the ongoing sustainability of the program. This has resulted in ACON having to cover an increasing salary shortfall and program costs, which is unsustainable over the longer term. For ACON's Substance Support Service to continue, requires the following:

- Increase in staffing levels to reflect increasing client demand
- An initial 9% increase in salary budget to bring it in line with current salaries
- A subsequent annual salary budget increase of 3.5% to align with annual salary increases according to the Enterprise Agreement
- Minimum of 10% program costs to cover service promotion, clinical supervision, management support and learning and development costs
- Minimum of 10% administration costs.

Additionally, ACON has faced challenges in working within activity based funding models particularly in jurisdictions with a lower population of sexually and gender diverse people. Since the inception of PHN localised funding, ACON has been commissioned by three PHNs. However, it was mutually recognised that the activity based funding model, where there were smaller numbers of sexually and gender diverse people, was not feasible. In these areas, the cost per output increases because the service has to work harder to do targeted promotion and maintain an adequate level of staffing to meet client needs when they present. While providing a specialist service option for harder-to-reach and underserviced populations is critical, localised funding models become less cost efficient and therefore less sustainable. In essence, people who reside outside of funded jurisdictions where there is a higher population of sexually and gender diverse people will be unable to access a specialist service, which becomes an equity issue. State-wide funding models would be more cost efficient and would enable specialist community-managed organisations to increase their reach to people of diverse gender and sexuality beyond a localised area, including those living within regional and remote regions who face additional barriers to accessing AOD and other health and community services.

Conclusion and Recommendations

This is the first comprehensive evaluation of a LGBTI-specific AOD counselling service in Australia. The findings of this evaluation showed improved substance use outcomes and psychological wellbeing during treatment among LGBTI people attending ACON's Substance Support Service. The qualitative findings also showed that current and former ACON clients were satisfied with the service that they had received, and valued the availability of an AOD counselling service that was tailored to the needs of LGBTI people. The findings also demonstrated that clients of ACON's service have a different sociodemographic and substance use profile compared to clients of mainstream AOD counselling services.

There were very few LGBTI clients at the mainstream services included in the quantitative component of this evaluation (six clients in total), which may be indicative of both underutilisation of these services by LGBTI people and underreporting of LGBTI clients in routine clinical data collection. However, interviews with LGBTI clients of mainstream AOD services showed that mainstream services can and do meet the needs of LGBTI people. This underscores that LGBTI people want good quality, supportive AOD treatment, irrespective of who delivers it.

The findings of this evaluation have identified the following key areas to improve the delivery of substance use treatment to LGBTI people at ACON's Substance Support Service and at mainstream AOD services in NSW.

- Increasing the utilisation of ACON's Substance Support Service requires further government investment. The evaluation has shown positive treatment outcomes among clients of the service. However, the cost analysis demonstrated that while the service is efficient, it is under-resourced. In addition to meeting increasing demand, activities to enhance the promotion and reach of the service are limited as it is operating at capacity. Additional resources are required to ensure that the service is sustainable and can continue to provide quality AOD treatment for LGBTI people in NSW.
- 2 Consider ways to enhance promotion of the service to LGBTI communities, in order to increase engagement with people who may not be aware of the service or are experiencing barriers to accessing support. Most clients of ACON's Substance Support Service were gay men seeking treatment for methamphetamine use. This may reflect current community need, but could also indicate underutilisation of the service by other groups within LGBTI communities, including lesbian and bisexual women, bisexual men, and trans and gender diverse people.
- 3 Improve the capacity of mainstream services to provide inclusive and appropriate services for LGBTI clients via participation in LGBTI-inclusivity training programs. Mainstream services already see LGBTI clients and should have the training and resources to offer good quality services, be knowledgeable about AOD issues specific to LGBTI people, and promote their services as LGBTI-inclusive.
- 4 Consider how to enhance promotion of the Substance Support Service to mainstream AOD and related services. This would increase awareness of the service among clinicians at mainstream services and strengthen referral pathways to and from ACON. However, if mainstream services cannot identify or do not recognise LGBTI clients, then they cannot identify opportunities to refer clients to ACON.

- 5 Improve monitoring and evaluation of client outcomes at the Substance Support Service. ACON is already collecting good quality client outcomes (COMS) data. However, this could be improved by follow-up of clients at treatment cessation and post-treatment (e.g. at three or six months). Currently, clients who leave treatment between scheduled collection of outcomes data (i.e. at every fourth counselling session) do not have exit data collected other than the reason for treatment cessation. In addition, post-treatment follow-up is not routinely conducted.
- 6 Consider introducing additional measures in NADAbase COMS. NADA could also consider introducing new optional measures for member services covering mental health diagnoses and treatment, substance use treatment history and sexual risk practices. The timeframe for questions related to injecting drug use and risk practices could be reduced from the previous three months to the previous four weeks to be consistent with other COMS measures (e.g. substance use in the previous four weeks). NADA could also work with their member services to improve data collection for existing measures of testing and treatment for sexually transmissible infections and blood-borne viruses.
- It is difficult to gauge the service needs of LGBTI people when relevant data is not collected as part of the national minimum data set for AOD services. The Australian Alcohol and Other Drug Treatment Services National Minimum Data Set does not have a question about sexual identity and the question about gender has the limited options of "male", "female", and "other" (Australian Institute of Health and Welfare, 2018b). NADA has included more detailed questions on sexual and gender identity for NSW non-government AOD services since 2016, but our evaluation found that these data are not being collected systematically by services. This suggests ongoing barriers to asking these questions among service providers, and a need for additional training and support so that services understand the importance of obtaining these data.

References

- ACON. (2019). A blueprint for improving the health and wellbeing of the trans and gender diverse community in NSW. Sydney: ACON.
- Adamson, S. J., Sellman, J. D., & Frampton, C. M. (2009). Patient predictors of alcohol treatment outcome: a systematic review. *Journal of Substance Abuse Treatment*, *36*, 75-86.
- Australian Government Department of Health. (2017). *National Drug Strategy 2017-2026*. Canberra: Commonwealth of Australia.
- Australian Institute of Health and Welfare. (2017). *National Drug Strategy Household Survey 2016:* detailed findings. *Drug Statistics series no. 31. Cat. no. PHE 214.* Canberra: AIHW.
- Australian Institute of Health and Welfare. (2018a). *Alcohol and other drug treatment services in Australia: 2016–17. Drug treatment series no. 31. Cat. no. HSE 207.* Canberra: AIHW.
- Australian Institute of Health and Welfare. (2018b). *Alcohol and Other Drug Treatment Services*National Minimum Data Set: data collection manual 2018–19. Version 2.0 (June 2018). Cat.

 no. DAT 9. Canberra: AIHW.
- Bonvicini, K. A., & Perlin, M. J. (2003). The same but different: clinician–patient communication with gay and lesbian patients. *Patient Education and Counseling*, *51*, 115-122.
- Bourne, A., Reid, D., Hickson, F., Torres-Rueda, S., Steinberg, P., & Weatherburn, P. (2015). "Chemsex" and harm reduction need among gay men in South London. *International Journal of Drug Policy*, 26, 1171-1176.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.
- Brecht, M.-L., Greenwell, L., & Anglin, M. D. (2005). Methamphetamine treatment: trends and predictors of retention and completion in a large state treatment system (1992–2002). *Journal of Substance Abuse Treatment*, 29, 295-306.
- Brener, L., Lea, T., Rance, J., Wilson, H., Bryant, J., & Ezard, N. (2018). Providing a model of health care service to stimulant users in Sydney. *Drugs: Education, Prevention and Policy, 25*, 130-137.
- Broady, T., Mao, L., Lee, E., Bavinton, B., Keen, P., Bambridge, C., . . . Holt, M. (2018). *Gay Community Periodic Survey: Sydney 2018*. Sydney: Centre for Social Research in Health, UNSW Sydney.
- Bui, H., Zablotska-Manos, I., Hammoud, M., Jin, F., Lea, T., Bourne, A., . . . Degenhardt, L. (2018). Prevalence and correlates of recent injecting drug use among gay and bisexual men in Australia: results from the FLUX study. *International Journal of Drug Policy*, 55, 222-230.
- Clark, V. & Braun, V. (2013). Teaching thematic analysis: overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26, 120-123.
- Cochran, B. N., & Cauce, A. M. (2006). Characteristics of lesbian, gay, bisexual, and transgender individuals entering substance abuse treatment. *Journal of Substance Abuse Treatment*, 30, 135-146.

- Cochran, B. N., Peavy, K. M., & Robohm, J. S. (2007). Do specialized services exist for LGBT individuals seeking treatment for substance misuse? A study of available treatment programs. *Substance Use & Misuse*, *42*, 161-176.
- Degenhardt, L., Darke, S., & Dillon, P. (2002). GHB use among Australians: characteristics, use patterns and associated harm. *Drug and Alcohol Dependence*, 67, 89-94.
- Flentje, A., Heck, N. C., & Sorensen, J. L. (2014). Characteristics of transgender individuals entering substance abuse treatment. *Addictive Behaviors*, 39, 969-975.
- Flentje, A., Heck, N. C., & Sorensen, J. L. (2015). Substance use among lesbian, gay, and bisexual clients entering substance abuse treatment: comparisons to heterosexual clients. *Journal of Consulting and Clinical Psychology*, 83, 325-334.
- Gossop, M., Darke, S., Griffiths, P., Hando, J., Powis, B., Hall, W., & Strang, J. (1995). The Severity of Dependence Scale (SDS): psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction*, *90*, 607-614.
- Graham, R., Berkowitz, B., Blum, R., Bockting, W., Bradford, J., de Vries, B., & Makadon, H. (2011). The health of lesbian, gay, bisexual, and transgender people: building a foundation for better understanding. Washington, DC: Institute of Medicine.
- Green, K. E., & Feinstein, B. A. (2012). Substance use in lesbian, gay, and bisexual populations: an update on empirical research and implications for treatment. *Psychology of Addictive Behaviors*, 26, 265-278.
- Greenfield, S. F., Brooks, A. J., Gordon, S. M., Green, C. A., Kropp, F., McHugh, R. K., . . . Miele, G. M. (2007). Substance abuse treatment entry, retention, and outcome in women: a review of the literature. *Drug and Alcohol Dependence*, 86, 1-21.
- Grigg, J., Manning, V., Arunogiri, S., Volpe, I., Frei, M., Phan, V., . . . Lubman, D. I. (2018). *Methamphetamine treatment guidelines: practice guidelines for health professionals (Second Edition)*. Richmond, Victoria: Turning Point.
- Guo, S., Barth, R. P., & Gibbons, C. (2006). Propensity score matching strategies for evaluating substance abuse services for child welfare clients. *Children and Youth Services Review, 28*, 357-383.
- Haber, P., Lintzeris, N., Proude, E., & Lopatko, O. (2009). *Guidelines for the treatment of alcohol problems*. Sydney: Sydney South West Area Health Service and The University of Sydney.
- Hochberg, Y. (1988). A sharper Bonferroni procedure for multiple tests of significance. *Biometrika*, 75, 800-802.
- Homish, G. G., Edwards, E. P., Eiden, R. D., & Leonard, K. E. (2010). Analyzing family data: a GEE approach for substance use researchers. *Addictive Behaviors*, *35*, 558-563.
- Hopwood, M., Lea, T., & Aggleton, P. (2015). Multiple strategies are required to address the information and support needs of gay and bisexual men with hepatitis C in Australia. *Journal of Public Health*, 38, 156-162.
- Hyde, Z., Doherty, M., Tilley, M., McCaul, K., Rooney, R., & Jancey, J. (2013). *The First Australian National Trans Mental Health Study: summary of results*. Perth: School of Public Health, Curtin University.
- Kaye, S., & Darke, S. (2002). Determining a diagnostic cut-off on the Severity of Dependence Scale (SDS) for cocaine dependence. *Addiction*, *97*, 727-731.

- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., . . . Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, *32*, 959-976.
- Knight, R., Karamouzian, M., Carson, A., Edward, J., Carrieri, P., Shoveller, J., . . . Fast, D. (2019). Interventions to address substance use and sexual risk among gay, bisexual and other men who have sex with men who use methamphetamine: a systematic review. *Drug and Alcohol Dependence*, 194, 410-429.
- Lancaster, K., Ritter, A., & Stafford, J. (2013). Public opinion and drug policy in Australia: engaging the 'affected community'. *Drug and Alcohol Review, 32*, 60-66.
- Lawrinson, P., Copeland, J., Gerber, S., & Gilmour, S. (2007). Determining a cut-off on the Severity of Dependence Scale (SDS) for alcohol dependence. *Addictive Behaviors*, *32*, 1474-1479.
- Lawrinson, P., Copeland, J., & Indig, D. (2005). Development and validation of a brief instrument for routine outcome monitoring in opioid maintenance pharmacotherapy services: The brief treatment outcome measure (BTOM). *Drug and Alcohol Dependence*, 80, 125-133.
- Lea, T., Bryant, J., & Treloar, C. (2016). Exposure to injecting drug use and hepatitis C knowledge among an online sample of young people. *Drugs: Education, Prevention and Policy, 23*, 84-88.
- Lea, T., Kolstee, J., Lambert, S., Ness, R., Hannan, S., & Holt, M. (2017). Methamphetamine treatment outcomes among gay men attending a LGBTI-specific treatment service in Sydney, Australia. *PLOS ONE, 12*, e0172560.
- Lea, T., Mao, L., Hopwood, M., Prestage, G., Zablotska, I., de Wit, J., & Holt, M. (2016). Methamphetamine use among gay and bisexual men in Australia: trends in recent and regular use from the Gay Community Periodic Surveys. *International Journal of Drug Policy*, 29, 66-72.
- Lea, T., Prestage, G., Mao, L., Zablotska, I., Wit, J., & Holt, M. (2013). Trends in drug use among gay and bisexual men in Sydney, Melbourne and Queensland, Australia. *Drug and Alcohol Review*, 32, 39-46.
- Lea, T., Reynolds, R., & de Wit, J. (2013). Alcohol and club drug use among same-sex attracted young people: associations with frequenting the lesbian and gay scene and other bars and nightclubs. Substance Use & Misuse, 48, 129-136.
- Lea, T., Ryan, D., Prestage, G., Zablotska, I., Mao, L., De Wit, J., & Holt, M. (2015). Alcohol use among a community-based sample of gay men: correlates of high-risk use and implications for service provision. *Drug and Alcohol Review, 34*, 349-357.
- Lee, N. K., & Rawson, R. A. (2008). A systematic review of cognitive and behavioural therapies for methamphetamine dependence. *Drug and Alcohol Review, 27*, 309-317.
- Leonard, W., Lyons, A., & Bariola, E. (2015). A closer look at private lives 2: addressing the mental health and wellbeing of lesbian, gay, bisexual, and transgender (LGBT) Australians.

 Melbourne: Australian Research Centre in Sex, Health & Society, La Trobe University.
- Leonard, W., Pitts, M., Mitchell, A., Lyons, A., Smith, A., Patel, S., . . . Barrett, A. (2012). *Private Lives* 2: The second national survey of the health and wellbeing of gay, lesbian, bisexual and transgender (GLBT) Australians. Melbourne: Australian Research Centre in Sex, Health & Society, La Trobe University.
- Lloyd, C. (2013). The stigmatization of problem drug users: a narrative literature review. *Drugs: Education, Prevention and Policy, 20,* 85-95.

- Loi, B., Lea, T., & Howard, J. (2017). Substance use, mental health, and service access among bisexual adults in Australia. *Journal of Bisexuality*, *17*, 400-417.
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: a practical, step-by-step guide for learning and teaching scholars. *AISHE-J: The All Ireland Journal of Teaching and Learning in Higher Education*, 9, 3351.
- Matheson, A., Roxburgh, A., Degenhardt, L., Howard, J., & Down, I. (2010). *Drug use, dependence and mental health among gay, lesbian and bisexual people reporting regular methamphetamine use, Sydney, Australia.* Sydney: ACON and the National Drug and Alcohol Research Centre, UNSW.
- Matthews, C. R., Lorah, P., & Fenton, J. (2006). Treatment experiences of gays and lesbians in recovery from addiction: a qualitative inquiry. *Journal of Mental Health Counseling*, 28, 111-132.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin*, 129, 674-697.
- Mooney-Somers, J., Deacon, R. M., Scott, P., Price, K., & Parkhill, N. (2019). *Women in contact with the Sydney LGBTQ communities: report of the SWASH Lesbian, Bisexual and Queer Women's Survey 2014*, 2016, 2018. Sydney: Sydney Health Ethics, University of Sydney.
- Najt, P., Fusar-Poli, P., & Brambilla, P. (2011). Co-occurring mental and substance abuse disorders: a review on the potential predictors and clinical outcomes. *Psychiatry Research*, 186, 159-164.
- Pennay, A. E., & Lee, N. K. (2009). Barriers to methamphetamine withdrawal treatment in Australia: findings from a survey of AOD service providers. *Drug and Alcohol Review, 28*, 636-640.
- Ritter, A., Matthew-Simmons, F., & Carragher, N. (2012). Prevalence of and interventions for mental health and alcohol and other drug problems amongst the gay, lesbian, bisexual and transgender community: a review of the literature. Sydney: National Drug and Alcohol Research Centre, UNSW.
- Ritter, A., & Sotade, O. (2017). *Non-Government Organisation Alcohol and Other Drugs Treatment Service Specifications*. Sydney: NSW Ministry of Health.
- Ross, J. E., & Darke, S. (1997). Benzodiazepine dependence and psychopathology among heroin users in Sydney. Sydney: National Drug and Alcohol Research Centre, UNSW.
- Roxburgh, A., Lea, T., de Wit, J., & Degenhardt, L. (2016). Sexual identity and prevalence of alcohol and other drug use among Australians in the general population. *International Journal of Drug Policy*, 28, 76-82.
- Schmidt, S., Mühlan, H., & Power, M. (2006). The EUROHIS-QOL 8-item index: psychometric results of a cross-cultural field study. *European Journal of Public Health*, 16, 420-428.
- Senreich, E. (2010). Are specialized LGBT program components helpful for gay and bisexual men in substance abuse treatment? *Substance Use & Misuse*, *45*, 1077-1096.
- Shoptaw, S., Reback, C. J., Peck, J. A., Yang, X., Rotheram-Fuller, E., Larkins, S., . . . Hucks-Ortiz, C. (2005). Behavioral treatment approaches for methamphetamine dependence and HIV-related sexual risk behaviors among urban gay and bisexual men. *Drug and Alcohol Dependence*, 78, 125-134.
- Slade, T., Grove, R., & Burgess, P. (2011). Kessler psychological distress scale: normative data from the 2007 Australian National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, 45, 308-316.

- Stardust, Z., Kolstee, J., Joksic, S., Gray, J., & Hannan, S. (2018). A community-led, harm-reduction approach to chemsex: case study from Australia's largest gay city. *Sexual Health, 15*, 179-181.
- Swift, W., Copeland, J., & Hall, W. (1998). Choosing a diagnostic cut-off for cannabis dependence. *Addiction*, 93, 1681-1692.
- Thorne, S. (2009). Ideas and action in a terrain of complexity. *Nursing Philosophy*, 10, 149-51.
- Topp, L., & Mattick, R. P. (1997). Choosing a cut-off on the Severity of Dependence Scale (SDS) for amphetamine users. *Addiction*, *92*, 839-845.
- Wray, T. B., Grin, B., Dorfman, L., Glynn, T. R., Kahler, C. W., Marshall, B. D., . . . Operario, D. (2016). Systematic review of interventions to reduce problematic alcohol use in men who have sex with men. *Drug and Alcohol Review, 35*, 148-157.