Matua Raki
National Addiction Workforce Development

Alcohol and other drug outcome measure (ADOM)

Report two

For period October 2015 to September 2016

Published May 2017

Te Pou o te Whakaaro Nui

Part of the Wise Group

Contents

Glossary

ADOM	Alcohol and Drug Outcome Measure
AOD	Alcohol and Other Drug (services)
DHB	District Health Board
Matched pairs	Two collections, in this case treatment start and treatment end collections
NGO	Non-Government Organisations
PRIMHD	Programme for the Integration of Mental Health Data
Tangata whai ora, Tāngata whai ora	Term encompassing, client, service user, consumer (plural uses macron)

Executive summary

This is the second ADOM report, covering the period October 2015 to September 2016. The first ADOM report described tāngata whai ora substance use, lifestyle and wellbeing, and recovery at a national level between 1 July 2015 and 30 June 2016.

ADOM collections detailed in this report do not represent the whole population, only those tāngata whai ora engaged with ADOM mandated services who completed ADOMs.

This report focuses on:

- ADOM data in PRIMHD
- ADOM treatment start collections information
- ADOM treatment start and treatment end (matched pairs) analysis.

Total ADOM collections in PRIMHD have increased in this time period. There are more matched pairs in this report to analyse than in the previous report, increasing from 735 to 885[1].

Amphetamine-type stimulants are showing effects in relation to housing and criminal activity (see Graph 41). The treatment start collections give an indication that amphetamine-type stimulants use is an increasing issue in terms of reported main substance of concern. It should be noted that amphetamine-type stimulants as specified in the ADOM does not differentiate between amphetamine powders, pills[2] containing amphetamine, or methamphetamine.

Treatment start collections also indicate more impact on physical and mental health for females. Issues for Māori and Pacific peoples warrant further examination, for instance we see alcohol becoming more of an issue in Pacific communities than other substances.

Matched pairs show a reduction in substances used between treatment start and treatment end for all substances (Table 1).

Greater and more sophisticated analysis will be possible as more matched pairs are collected and the number of collections rise. Large DHBs that are not yet submitting ADOM collections may have a significant impact on those numbers.

As more data becomes available it is envisaged that specific reports may focus on particular issues such as demographics or substances of concern. It will also be more possible to compare reporting periods, giving insight into trends.

[1] In the Oct 2015 to Sep 2016 period it includes start from Jul 2015. In the previous period it only included starts that were in the period.

[2] For example. Dexedrine, ProCentra, Dextrostat, Ritalin, Concerta, Vyvanse.

Table 1: Average days of substance use amongst those with use at treatment start, with confidence intervals, by ADOM treatment start, treatment end and outcome, matched pairs, October 2016 - September 2016

Question	Start mean	End mean	Outcome (Start minus end mean)	Cohen's d (effect size with 95% CI)	Effect of treatment
Q1: Alcohol days of use	9.0 *(n=596)*	4.3 *(n=596)*	4.7	0.64 (0.52-0.76)	Medium
Q2: Alcohol number of standard drinks consumed in a typical days use	10.7 *(n=582)*	5.9 (n=*579)*	4.8	0.55 (0.43-0.66)	Medium
Q3: Cannabis number of days	12.0 *(n=263)*	5.9 *(n=261)*	6.1	0.63 (0.45-0.80)	Medium
Q4: Amphetamine-type stimulant number of days	9.4 *(n=91)*	2.4 *(n=91)*	7.0	0.96 (0.65-1.27)	Large
Q5: Opioid number of days	15.6 *(n=20)*	1.0 *(n=20)*	14.6	1.69 (0.94-2.38)	Large
Q6: Sedatives/tranquilisers number of days	14.7 *(n=28)*	2.8 *(n=28)*	11.9	1.23 (0.64-1.78)	Large
Q8: Cigarettes - number smoked on average per day	12.4 *(n=549)*	10.4 *(n=535)*	2.0	0.21 (0.09-0.33)	Small
Q10: Number of days injecting drugs	12.6 *(n=21)*	1.1 *(n=21)*	11.5	1.56 (0.85-2.22)	Large

Notes: Cohen (1992)[3] reports the following intervals for d: .2 to .5: small effect; .5 to .8: medium effect; .8 and higher: large effect.

[3] Cohen, J (1992) A Power Primer, Quantitative Methods in Psychology, *Psychologic Bulletin* Vol 112, No.1 155-159.

Method[4]

Data used in this report is from PRIMHD as supplied by the Ministry of Health extracted on 16 January 2017. The analysis period is for October 2015 to September 2016.

Inclusion and exclusion criteria

AOD referral entering into mandated services:

- includes teams mandated to collect ADOM[5]
- includes team type of alcohol and drug team or a co-existing team
- includes tāngata whai ora aged 18 years and over
- includes referrals with an in scope contact. Excludes activity settings: WR, PH, SM, OM and exclude activity type: T08, T32, T35, T46, T47 and T49. The activity type is a contact
- includes first in scope contact for the referral is in the period of the report
- excludes Waitematā DHB from referrals and ADOM data as this DHB area uses a local outcome tool (Visual ADOM-R) which does not align with PRIMHD mapping requirements.

Treatment start with the corresponding referrals: Include only referrals with a treatment start ADOM collections including assessment only (RC13, RC14, RC15) in analysis.

ADOM collections analysis:

- includes teams recognised or identified as those mandated to collect ADOM
- includes tāngata whai ora are aged 18 years and over
- excludes ADOM collections with five or more missing items[6]
- excludes RC19 – Treatment end – DNA and RC21 – Treatment end – other
- excludes Waitematā DHB as the data uses local outcome tool (Visual ADOM-R) which does not align to PRIMHD mapping requirements.

For treatment start ADOM collections (RC13, RC14) is used.

ADOM matched pairs:

- based on ADOM collections above
- includes those for 28 days or longer
- uses the date of the end collection. Start collection can be outside the period but after 1 July 2015.

Opioid substitution services data:

- based on ADOM collections above
- includes tāngata whai ora in services who are coded as an opioid substitution team and/or those who receive contact T18 – Methadone treatment specialist service attendances or T19 – Methadone treatment specialist attendances (consumers of authorised GPs).

Other notes

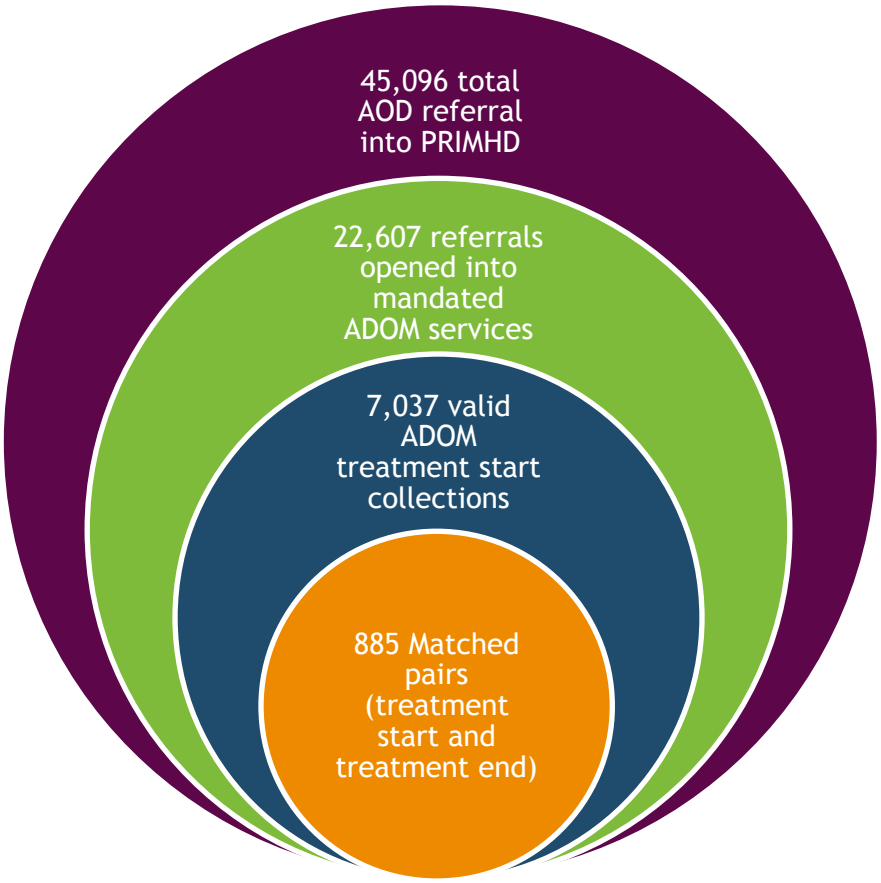
- 'Not specified answers' to items are excluded for specific questions. For example, for substance of main concern there are a number of collections without a response to this question.

[4] Please see ADOM report building rules for a full explanation of methodology, inclusion and exclusion of data in these reports.
[5] Some teams in the list are excluded. This is because the team is coded as a community mental health team, and AOD only referrals cannot be differentiated.
[6] This is excluding questions 7, 9 and 11.

Part 1: ADOM in PRIMHD

- 45,096[7] – The total number of all referrals into all AOD services between 1 October 2015 and 30 September 2016.
- 22,607 - The total number of referrals which were opened into PRIMHD from **mandated services** between 1 October 2015 and 30 September 2016.
- 7,037 - The total number of valid ADOM **treatment start collections**.
- 885 - The total number of matched pairs - those ADOM collections that have *both* a treatment start and treatment end. Treatment end is in the period.

Graph 1: Total number of AOD referrals, AOD referrals entered into mandated services, ADOM treatment start, and ADOM matched treatment start and end pairs, October 2015 to September 2016

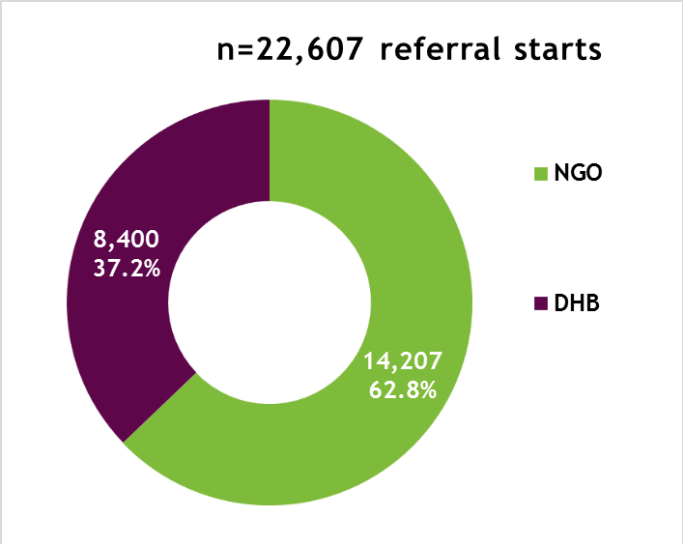


Please note, when interpreting this report it is important to bear in mind the figures above. **Analysis on small numbers does not lead to effective population level interpretation.** Of all AOD referrals into PRIMHD, a smaller number are valid in mandated services, smaller numbers still have an ADOM collection at treatment start. Only 885 people have both a corresponding collection at treatment end (matched pairs).

[7] Includes under 18 years, Waitematā DHB, inpatient and residential data, whereas the next category does not.

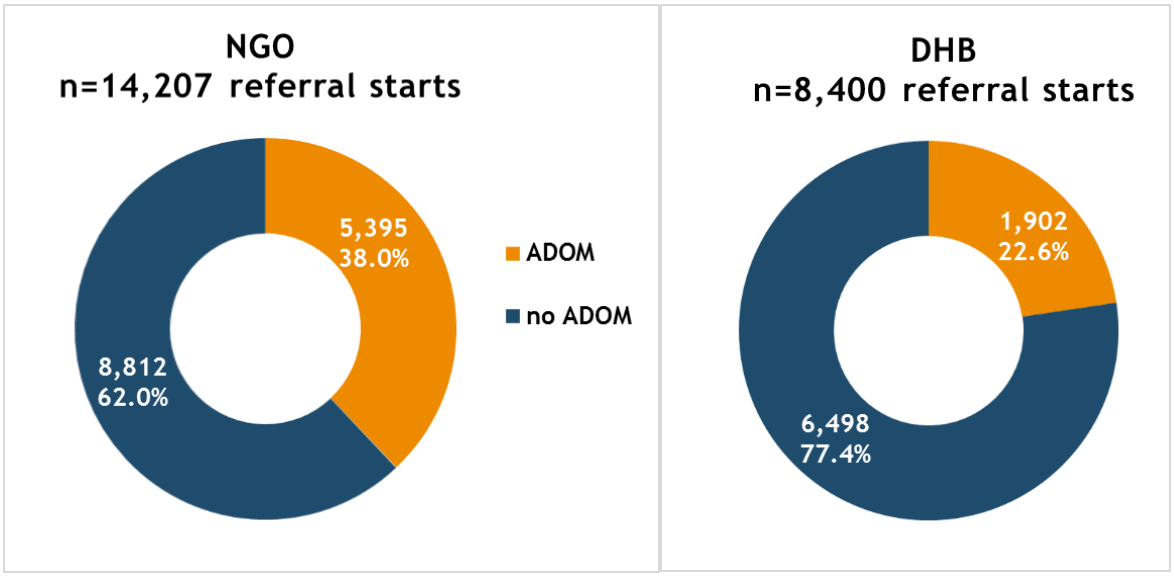
Graph 2 shows the number and percentage of referrals into ADOM mandated AOD services by NGOs and DHBs.

Graph 2: AOD referrals into ADOM mandated services, by organisation type (NGO and DHB), October 2015 - September 2016



Graph 3 shows the percentage of at least one ADOM collection (treatment start or assessment only) against referrals in DHBs and NGOs. Over time the number of AOD referrals with ADOM collections is expected to rise for both NGOs and DHBs.

Graph 3: AOD referrals with at least one ADOM Collection (treatment start or assessment only) by organisation type (NGO and DHB), October 2015 - September 2016



Graph 4 shows referrals with at least one ADOM (treatment start) collection by an NGO and a DHB in each DHB area[8]. Some DHBs show no ADOM collections (reported to PRIMHD). This is largely due to IT system issues and does not indicate that ADOM is *not* being used in these DHBs.

NGO collections by highest percentage of treatment start collections against referrals are highlighted in table 2.

Graph 4: Percentage of AOD referrals into mandated services with at least one treatment start ADOM collection by organisation type and DHB area[9], October 2015 - September 2016

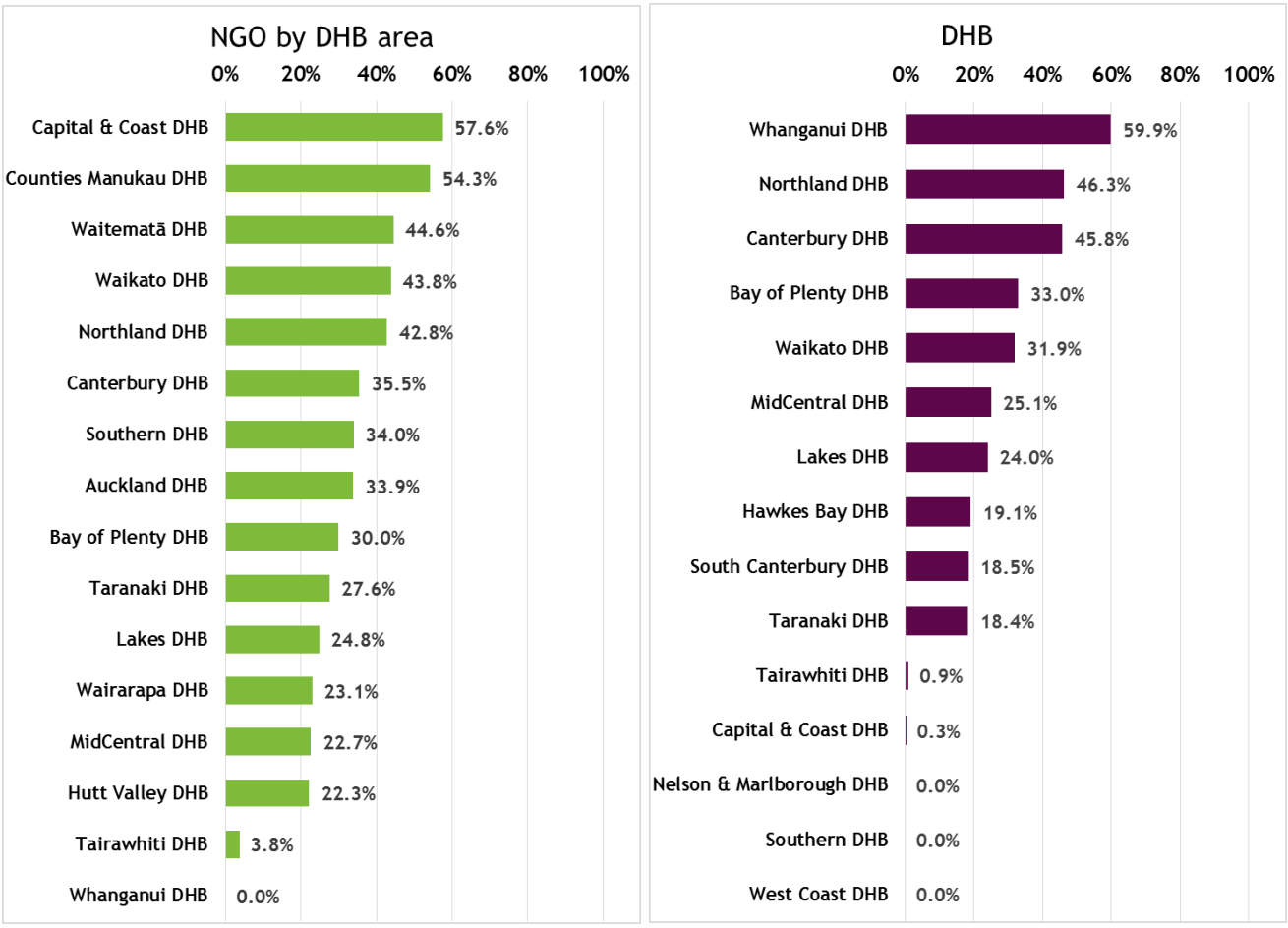


Table 2: NGOs with highest percentages of treatment start collections ADOM against referrals, October 2015 – September 2016

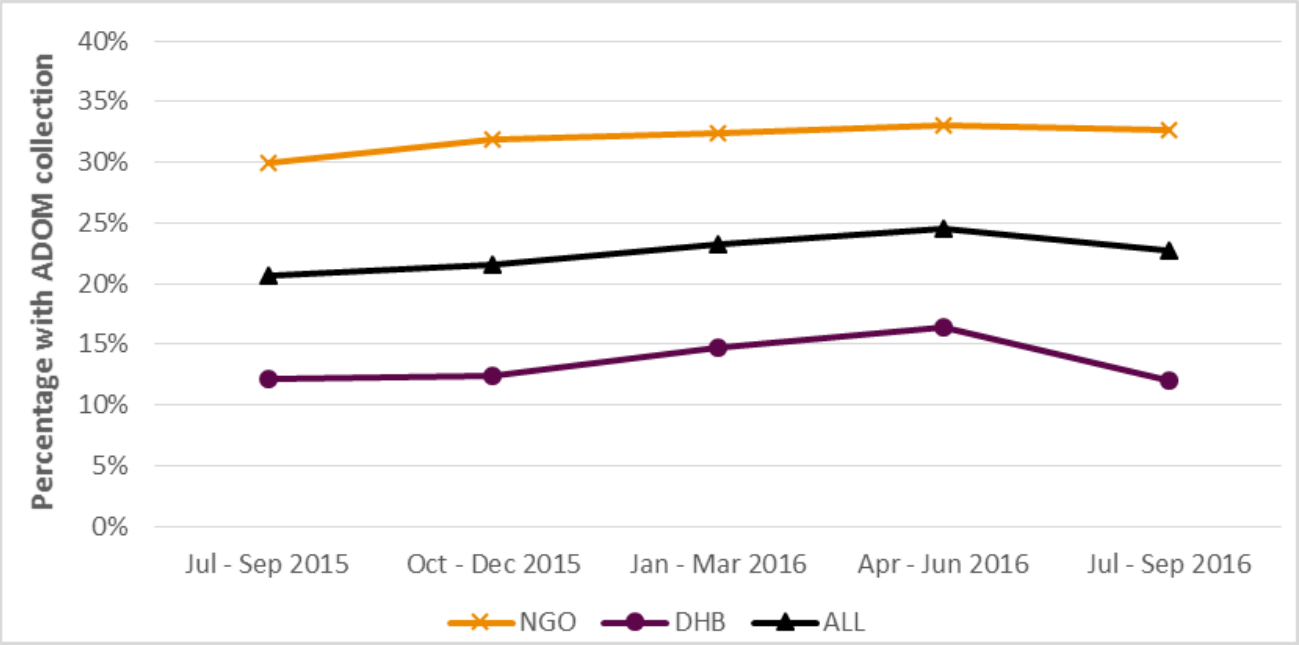
NGO	Percentage	Number of referrals
Raukura Hauora O Tainui Trust	85%	136
Te Puna Hauora Ki Uta Ki Tai	82%	49
Gore and Districts Community Counselling Centre Incorporated	79%	135
Odyssey House Trust	74%	430
Care NZ (Est 1954) Limited	64%	3,089
Get Smart Tauranga Trust	63%	56
Te Korowai Hauora o Hauraki Incorporated	63%	40
Best Care (Whakapai Hauora) Charitable Trust	62%	195

[8] Waitematā DHB (providing regional AOD services for Auckland and Counties Manukau DHB's) have significant collections (outside of this report) using their own tool, Visual ADOM-R.

[9] There are no eligible NGO's currently in the Nelson Marlborough, Hawkes Bay, West Coast and South Canterbury DHB area that have alcohol and other drug teams. The following DHBs have no specific alcohol and other drug teams: Hutt Valley, Wairarapa,

A different calculation method explores if there was a valid ADOM collection in a three month period for those referrals that had an activity within the period. The ADOM collection can be any reason. There is a drop off of DHBs ADOM collections against referrals (Graph 5). This is caused partially by some DHBs not having submitted data after July due to changes in PRIMHD.

Graph 5: Percentage of referrals with valid ADOM collection, by organisation type, July 2015 - October 2016



ADOM collections by reason for collection

Graph 6 shows the total ADOM collections by reason for collection (RFC): assessment, start, review or treatment end. NGO services show more treatment starts and treatment end collections; a higher proportion of reviews are undertaken in DHB services.

Graph 6: Number valid ADOM collection by reason for collection and organisation type, October 2015 - September 2016

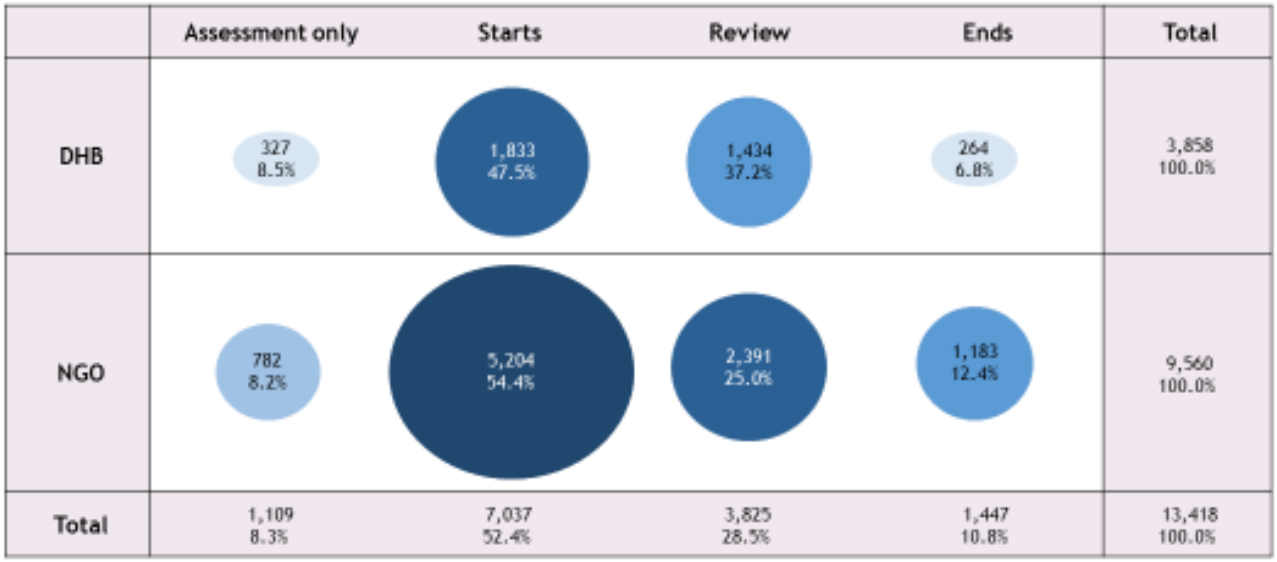


Table 3 illustrates how many collections were not included in the analysis due to not meeting the report building business rules, such as five questions or more not answered.

Table 3: Number of ADOM collection valid and not valid, by reason for collection, October 2015 - September 2016

	Valid	Not valid	Total	% valid
Assessment only	1,109	43	1,152	96%
Start	7,037	286	7,323	96%
Review	3,825	355	4,180	92%
End	1,447	396	1,843	79%

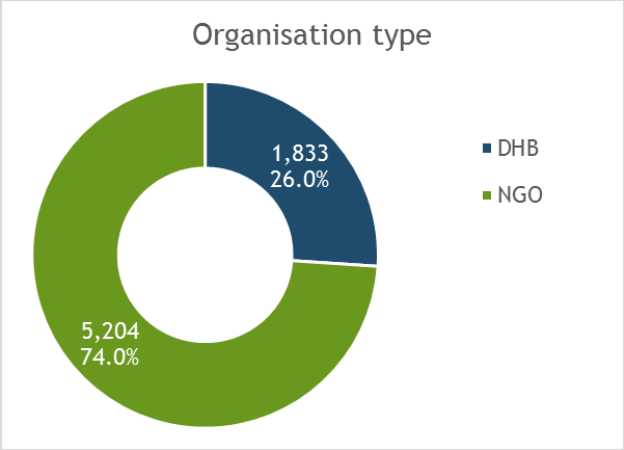
Note: Valid is when there is four or less items missing from the ADOM collection.

Part 2: ADOM treatment starts

The following section describes ADOM treatment start information. This provides an overview of the demographics, substance, and health and wellbeing of tāngata whai ora attending services at a national and DHB area level.

Graph 7 shows ADOM treatment start collections by DHB and NGO, with percentages.

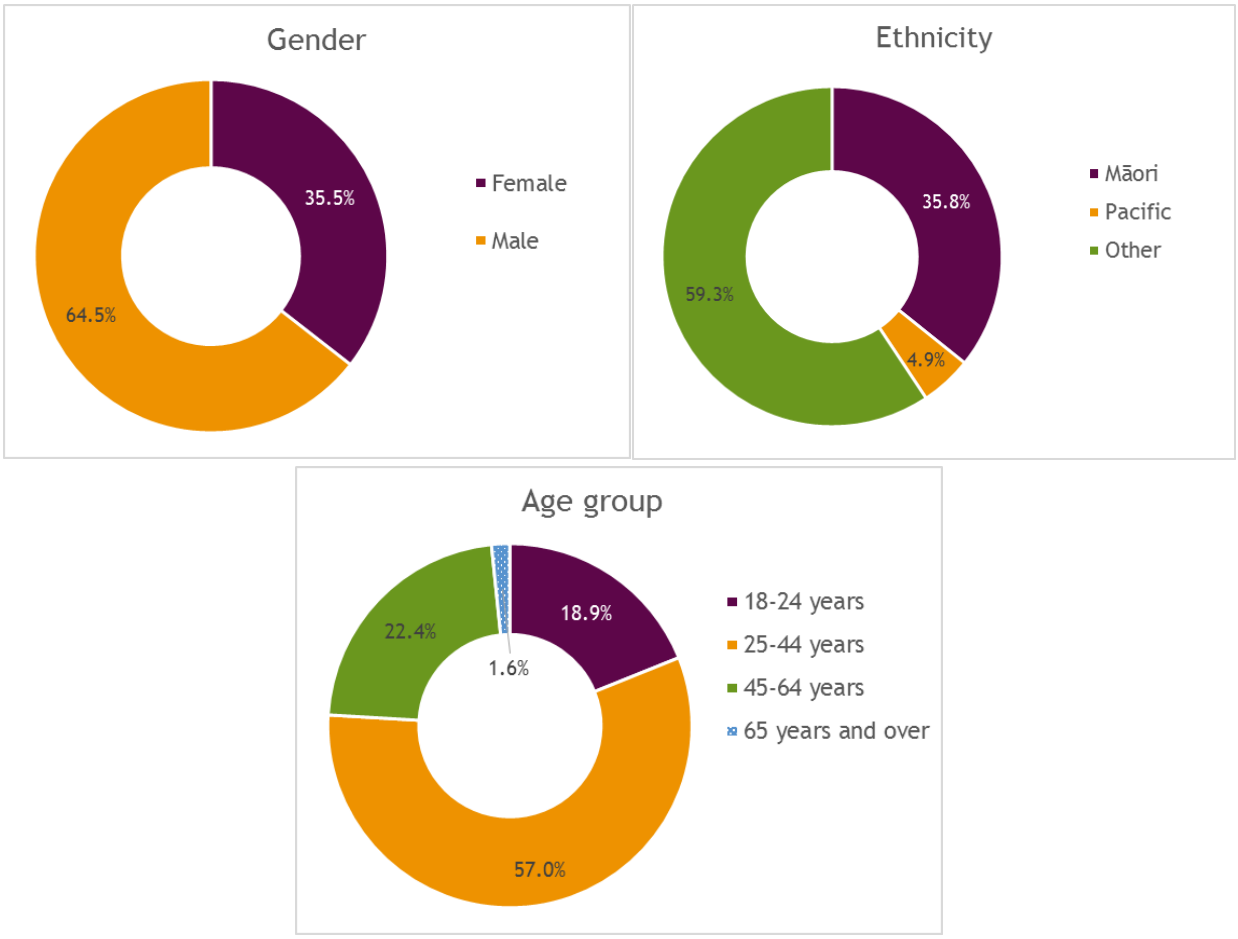
Graph 7: ADOM treatment start collection by organisation type, October 2015 – September 2016



Graph 8 shows the some demographic profiles of treatment start ADOM collections. The gender distribution is in line with those accessing AOD services. Māori people make up 35.8 per cent, and are over represented in these statistics when compared to the general Māori population of 15 per cent[10]. The largest age group, at 57 per cent, are 25 to 44 year olds. According to 2013 census only 34 per cent of the general population 18 years and over make up this age group.

[10] Information taken from http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/infographic-culture-identity.aspx

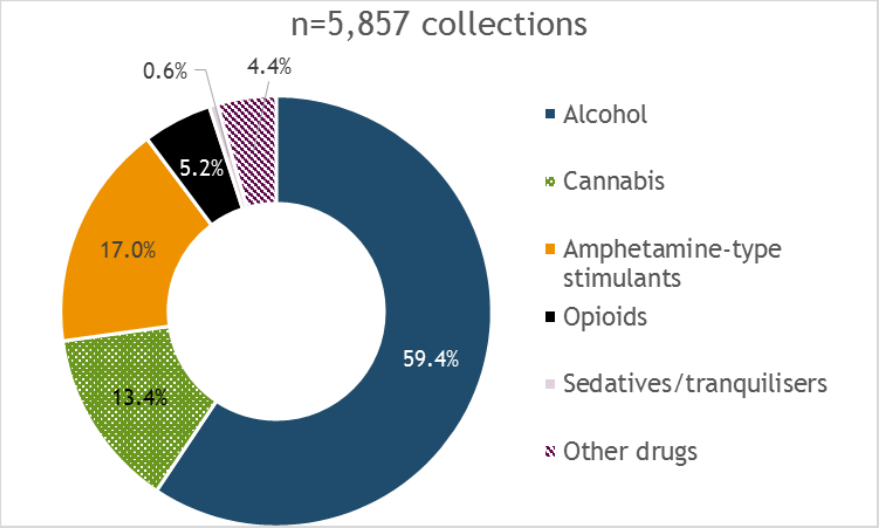
Graph 8: Profile of ADOM treatment start collection by gender, ethnicity and age group, October 2015 – September 2016



ADOM treatment start collections by substance of concern

Graph 9 shows what people stated was their main substance of concern among the 5,857 treatment start collections. Please note that ADOM is collected in service settings and not all people specify a substance of concern each time. Therefore, figures quoted here are not indicative of substance use in the general population, particularly as not everyone who has a substance misuse issue accesses services.

Graph 9: Distribution of substance of main concern at ADOM treatment start collections, October 2015 - September 2016[11]



While primary substance of concern has been focussed on in this report, it was deemed useful to explore what secondary substance(s) of concern were stated as people often have multiple substance misuse issues. Where not reported as main substance of concern Alcohol features as a second substance of concern in all other categories. Likewise amphetamine type substances also feature in all categories, where not main substance of concern. Analysis of this pattern will be followed over the next year of reports to feature as part of future reports.

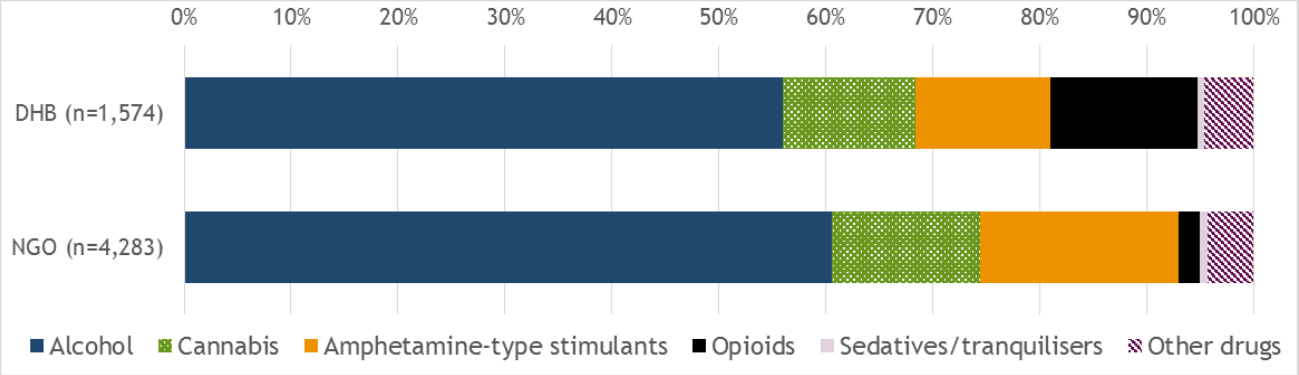
Table 4: Second substance of concern by substance of main concern, October 2015 – September 2016

Substance of main concern	Second substance of concern
Alcohol (3,477)	Cannabis (683)
	Other drug, unspecified (160)
	Amphetamine-type stimulants (126)
Cannabis (787)	Alcohol (285)
	Amphetamine-type stimulants (104)
	Other drug, unspecified (34)
Amphetamine-type stimulants (994)	Cannabis (309)
	Alcohol (256)
	Other drug, unspecified (30)
Opioids (304)	Alcohol (38)
	Sedatives/tranquilisers (38)
	Amphetamine-type stimulants (33)

[11] There has been a rise from 15.9% of amphetamine type substances reported as main substance of concern to 17% in this reporting period.

Graph 10 shows the main stated substance of concern at treatment start by organisation and substance. Alcohol is the main substance of concern in both DHBs and NGOs. It is useful to note that apart from one service, all opioid substitution services (OST) reporting to PRIMHD sit in DHBs.

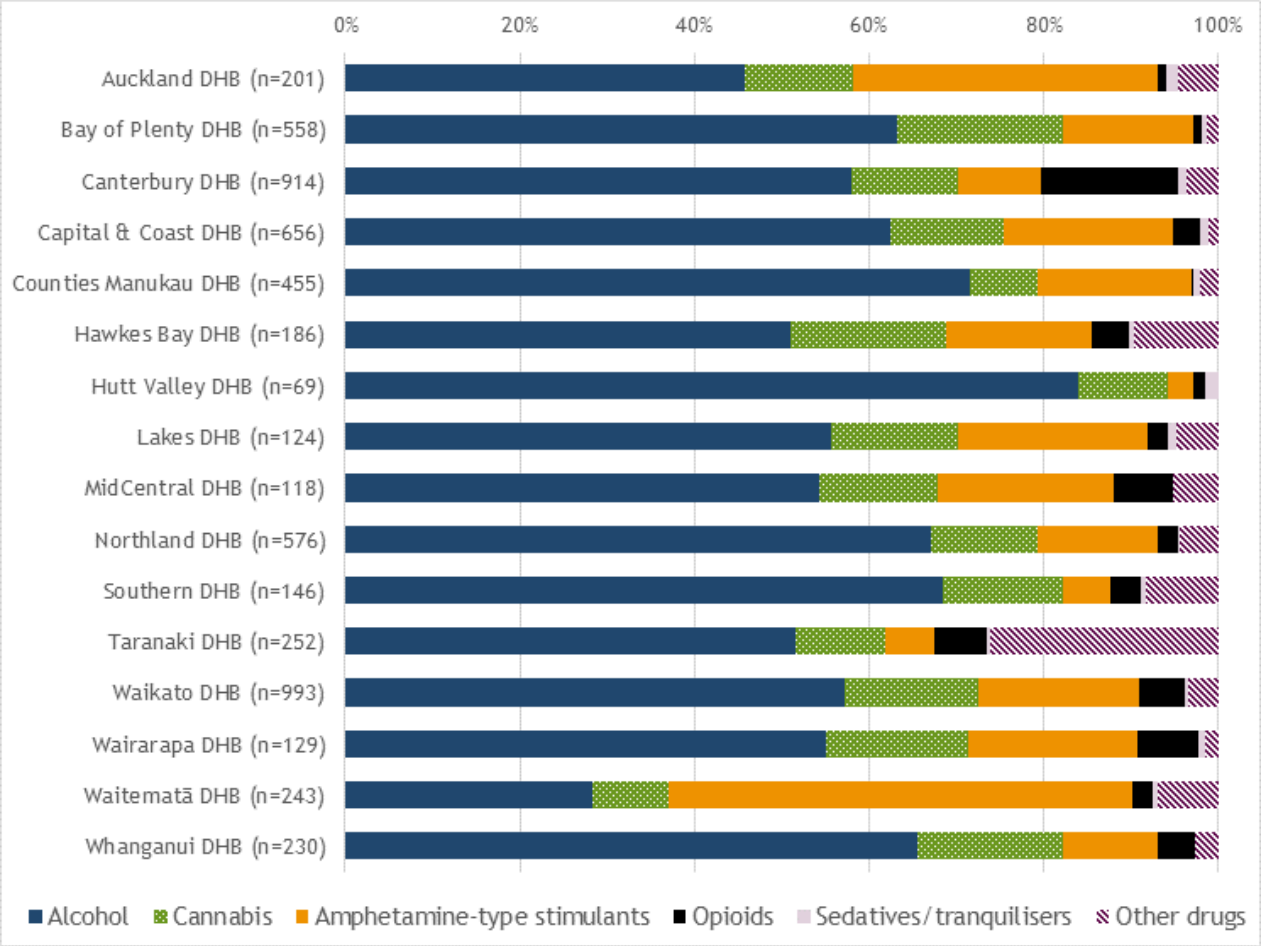
Graph 10: Distribution of substance of main concern[1] at ADOM treatment start collections, by organisation type, October 2015 - September 2016



(1) Substance of main concern not specified/not applicable: DHB 249, NGO 921 and Total 1,180.

Graph 11 shows stated main substance of concern by DHB area, including NGOs. Auckland and Waitematā (NGOs only) show much higher presentations of amphetamine-type stimulants than other DHB areas.

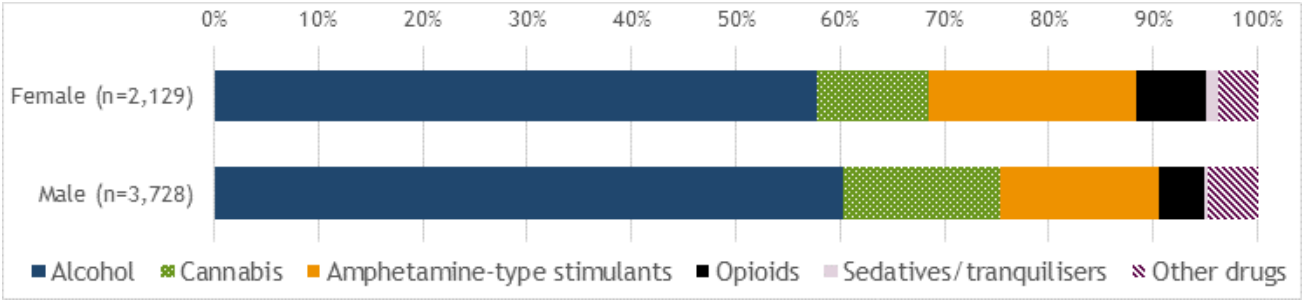
Graph 11: Distribution of substance of main concern at ADOM treatment start collections by DHB area, October 2015 - September 2016[12]



Main substance of concern by gender

Graph 12 shows the main substance of concern by gender. Females identify amphetamine type substance and opioids as main substance of concern more than males.

Graph 12: Distribution of substance of main concern at ADOM treatment start collections, by gender, October 2015 - September 2016

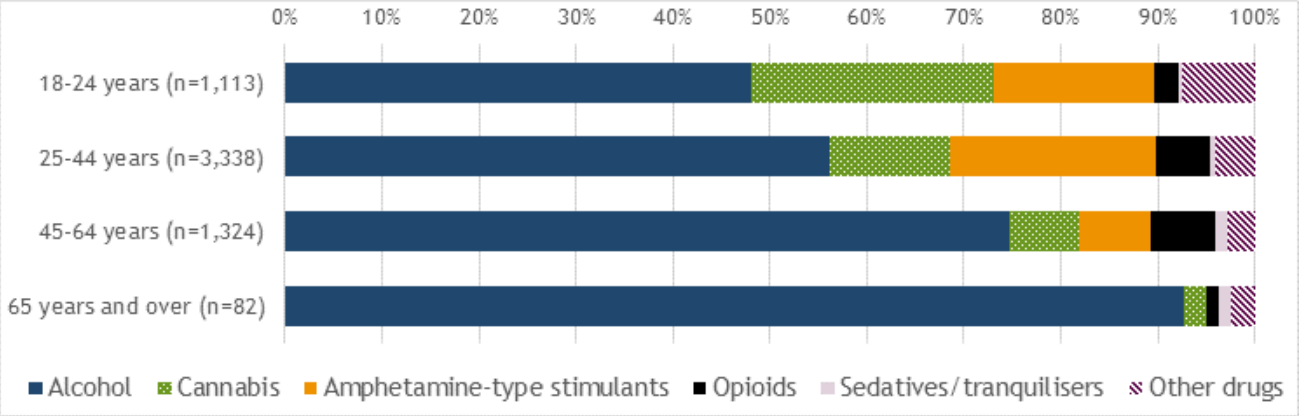


Main substance of concern by age group

Graph 13 shows main substance of concern by age and indicates a pattern of older people presenting to services with primarily alcohol problems.

[12] South Canterbury and Tairāwhiti DHBs have been excluded due to small numbers; Nelson Marlborough and West Coast DHBs do not have any ADOM submissions.

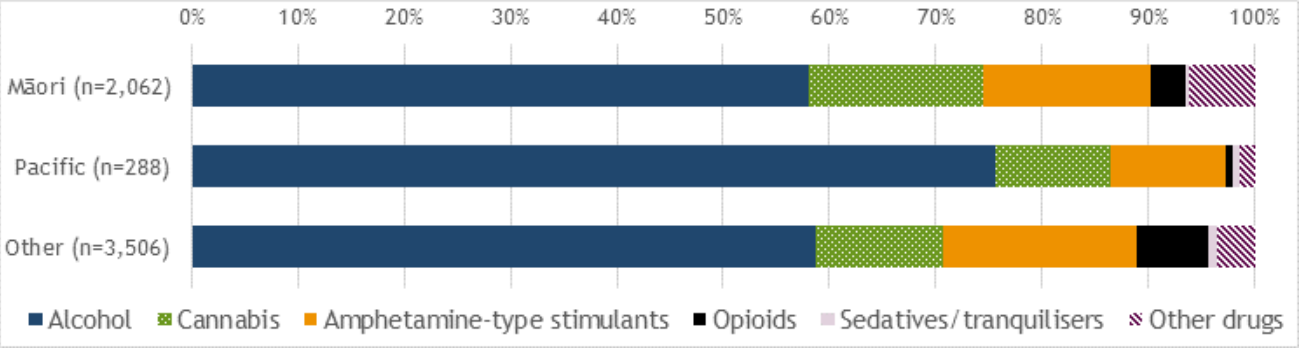
Graph 13: Distribution of substance of main concern at ADOM treatment start collections, by age group, October 2015 - September 2016



Main substance of concern by ethnicity

Graph 14 shows main substance of concern by ethnicity. More Pacific people present with alcohol as substance of main concern than other ethnicities.

Graph 14: Distribution of substance of main concern at ADOM treatment start collections, by ethnicity, October 2015 - September 2016



ADOM treatment start collections by lifestyle and wellbeing

This section is focused on the lifestyle and wellbeing of people accessing services, based on the questions collected in section 2 of the ADOM at treatment start.

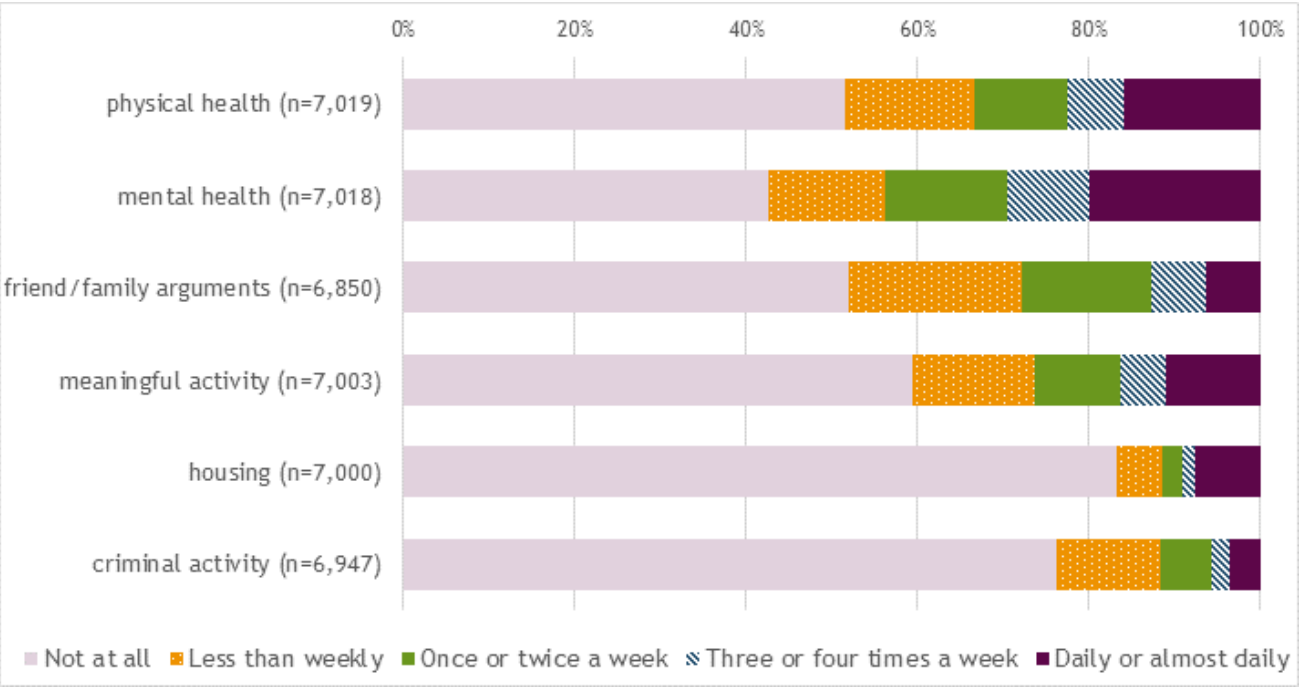
Lifestyle and wellbeing – all tāngata whai ora

Question key:
Q12 How often has your physical health caused problems in your daily life?
Q13 How often has your general mental health caused problems in your daily life?
Q14 How often has your alcohol or drug use led to problems or arguments with friends or family members?
Q15 How often has your alcohol or drug use caused problems with your work or other activities in any of the following: social, recreational, looking after children or other family members, study or other personal activities?
Q17 Have you had difficulties with housing or finding somewhere stable to live?
Q18 How often have you been involved in any criminal or illegal activity such as driving a motor vehicle under the influence of alcohol or drugs, assault, shoplifting, supplying an illicit substance to another person?

Graph 15 shows overall response distribution of tāngata whai ora to ADOM Section 2, lifestyle and wellbeing questions. Results indicate that the lifestyle and wellbeing of tāngata whai ora has been negatively impacted, regardless of their gender, age, ethnicity or the substance they used.

Results indicate nearly 34 per cent of tāngata whai ora experience at least some physical health problems each week, and nearly 44 per cent of people state they are affected by mental health problems each week. Around 12 per cent of tāngata whai ora state they are engaged in criminal activity at least weekly.

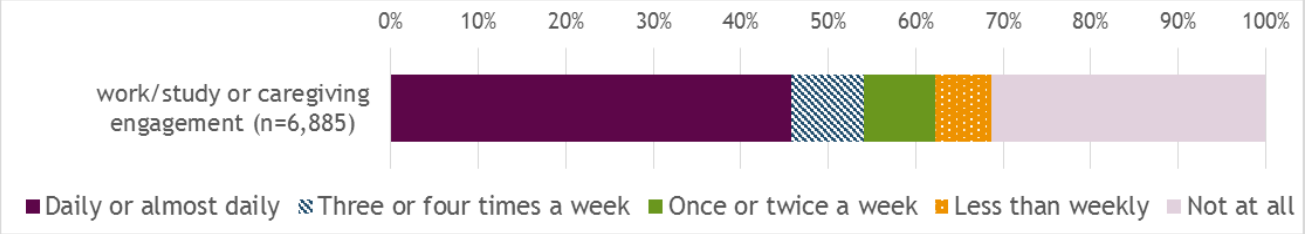
Graph 15: Distribution of lifestyle and wellbeing responses at ADOM treatment start collections, October 2015 - September 2016



Question key:
Q16 How often have you engaged in any of the following: paid work, voluntary work, study, looking after children or other caregiving activities?

Graph 16 shows engagement with work and other activities. The distribution on question 16 is presented separately as it is a reversed question in ADOM. The higher the number the better the engagement with work and other activities. Over 60 per cent of tāngata whai ora report being engaged in work, study or caregiving each week.

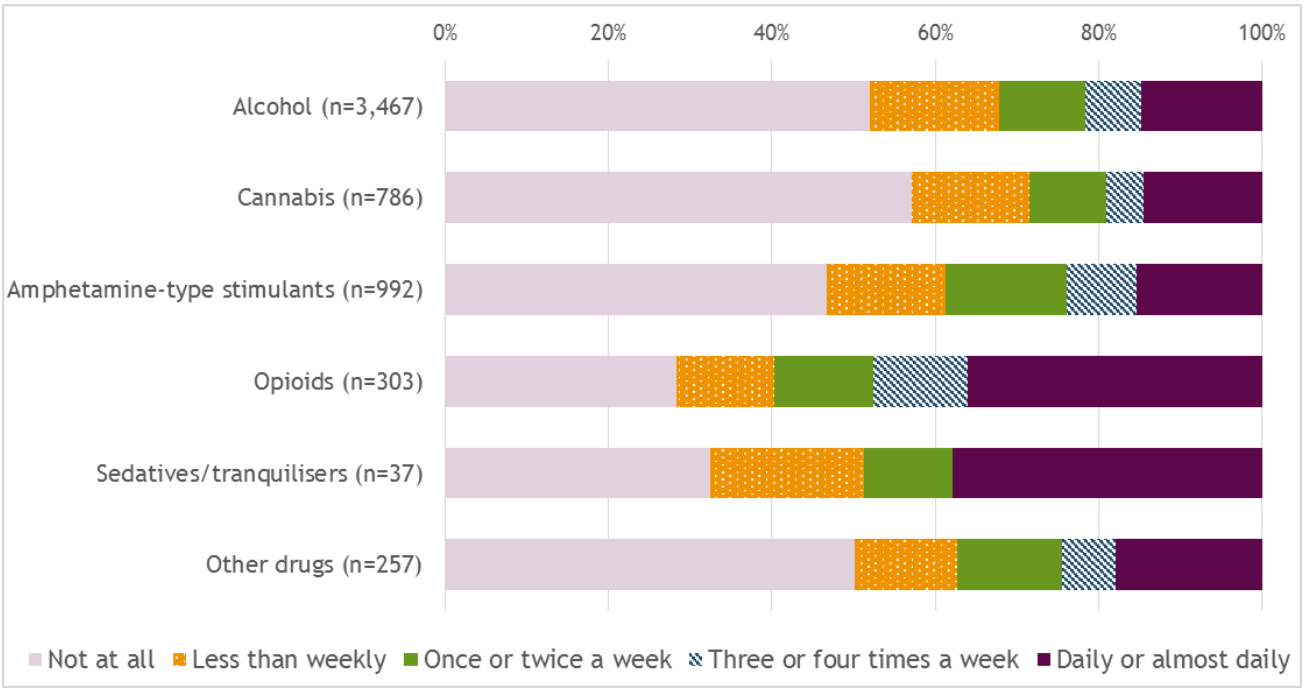
Graph 16: Distribution of Lifestyle and wellbeing Q16 responses at ADOM treatment start collections, October 2015 – September 2016



Lifestyle and wellbeing – by main substance of concern

Graph 17 shows tāngata whai ora that specify sedatives/tranquilisers and opiods as main substances of concern report greater physical health problems.

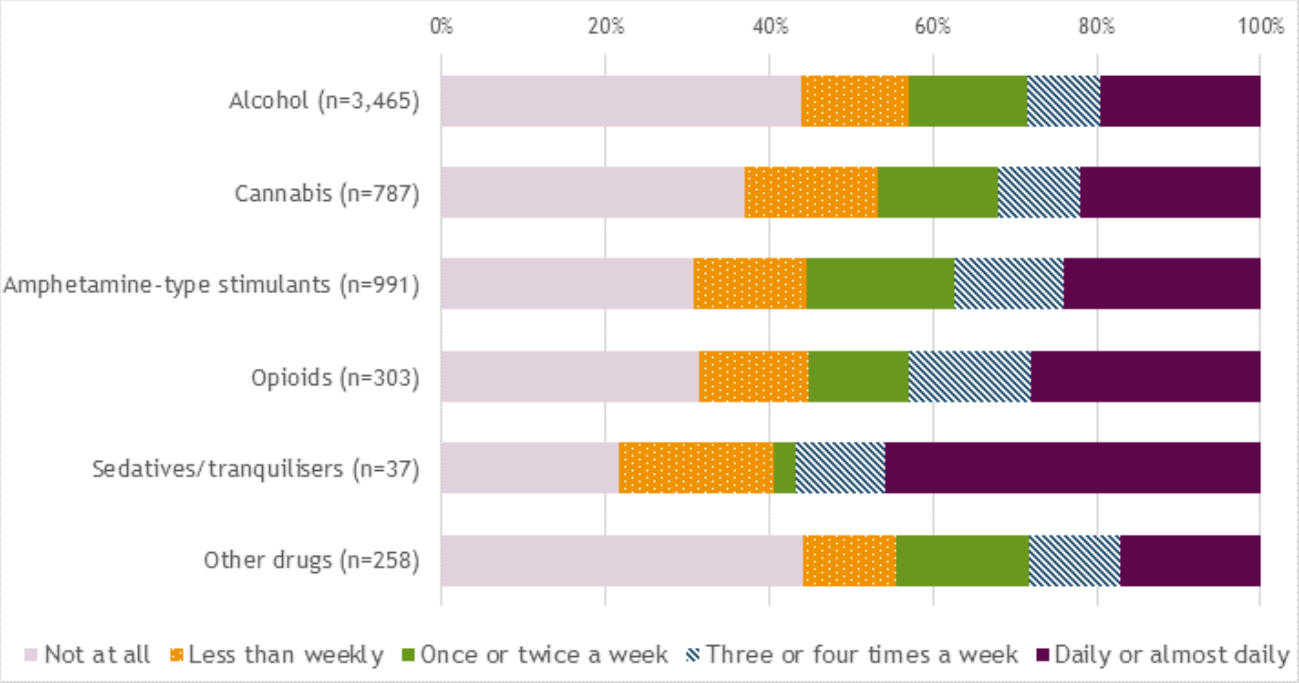
Graph 17: Distribution of Q12 (physical health problems) responses at ADOM treatment start collection, by substance of main concern, October 2015 – September 2016[13]



[13] Sedatives/tranquilisers have very low numbers so may not be statistically relevant (throughout).

Graph 18 shows that over half of the tāngata whai ora that use any substance report some level of mental health problems and those who use sedatives/tranquilisers, opioids and amphetamine-type stimulants are more likely to report also having mental health problems[14].

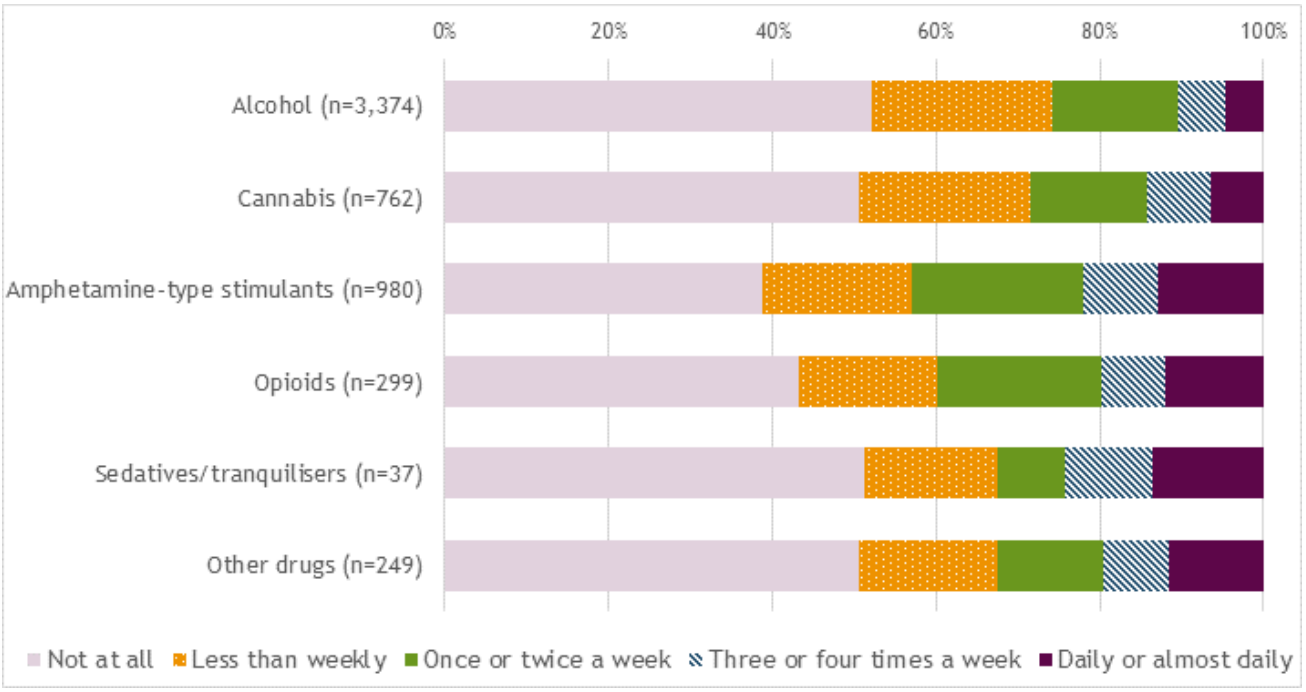
Graph 18: Distribution of Q13 (mental health problems) responses at ADOM treatment start collection, by substance of main concern, October 2015 – September 2016



Graph 19 shows tāngata whai ora responses to how often they have had arguments or problems with family or friends due to their drug use. Those who specified amphetamine type substances and opiod use show more problems, more often.

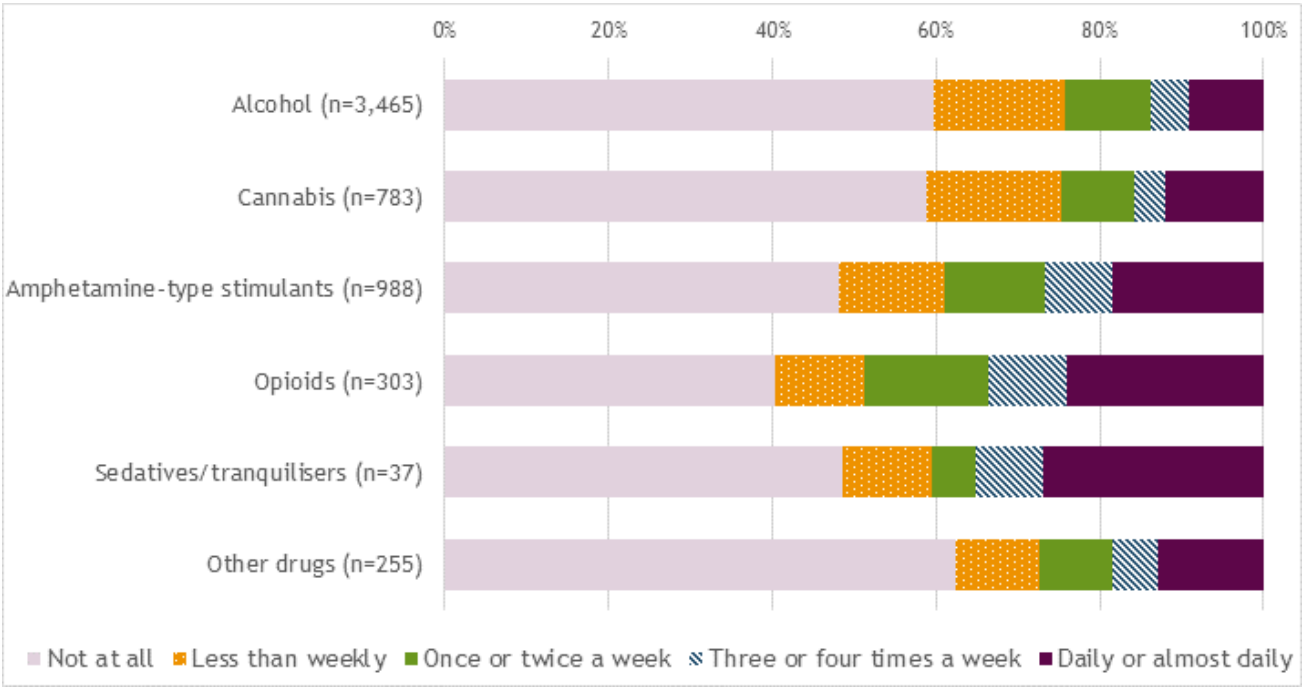
[14] Sedatives/tranquilisers are a small total number.

Graph 19: Distribution of Q14 (family & friend arguments) responses at ADOM treatment start collection, by substance of main concern, October 2015 – September 2016



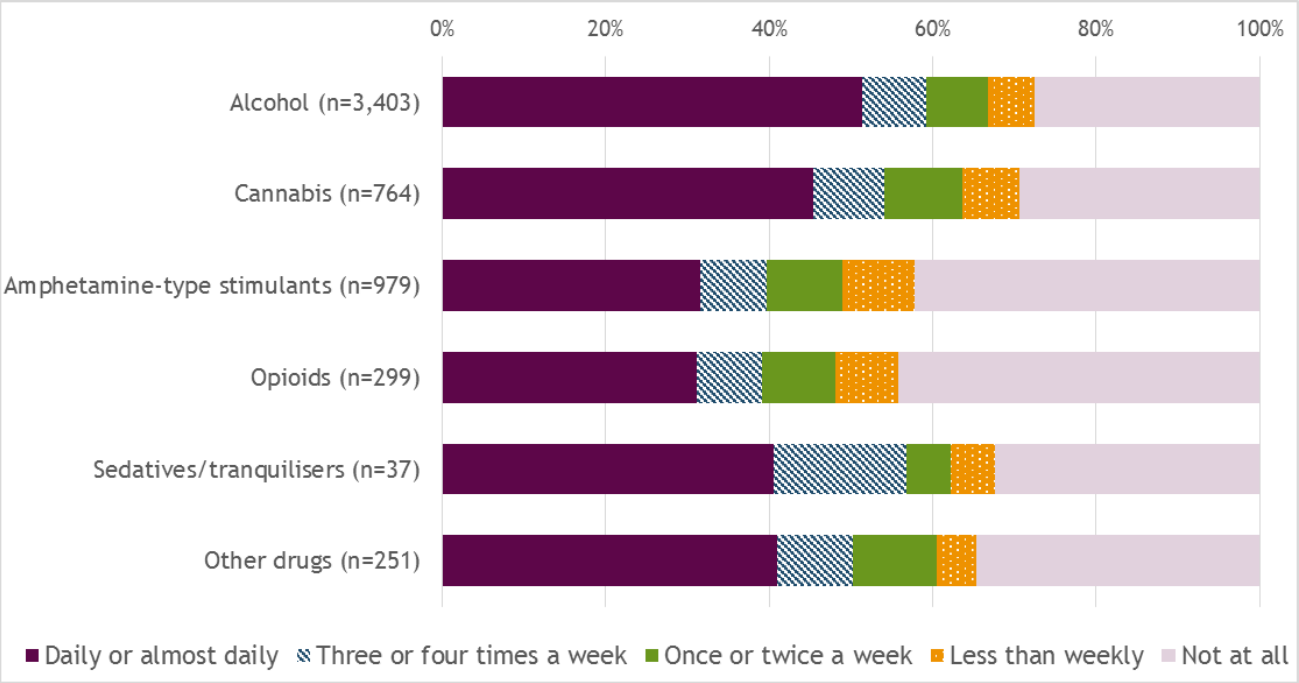
Graph 20 shows how often tāngata whai ora have problems related to work, social, care giving, recreational or other personal activities due to their alcohol or drug use. Those that specify amphetamine type stimulants or opioids as their main drug of concern are more likely to have problems and more often.

Graph 20: Distribution of Q15 (work, recreational, care giving problems) responses at ADOM treatment start collection, by substance of main concern, October 2015 – September 2016



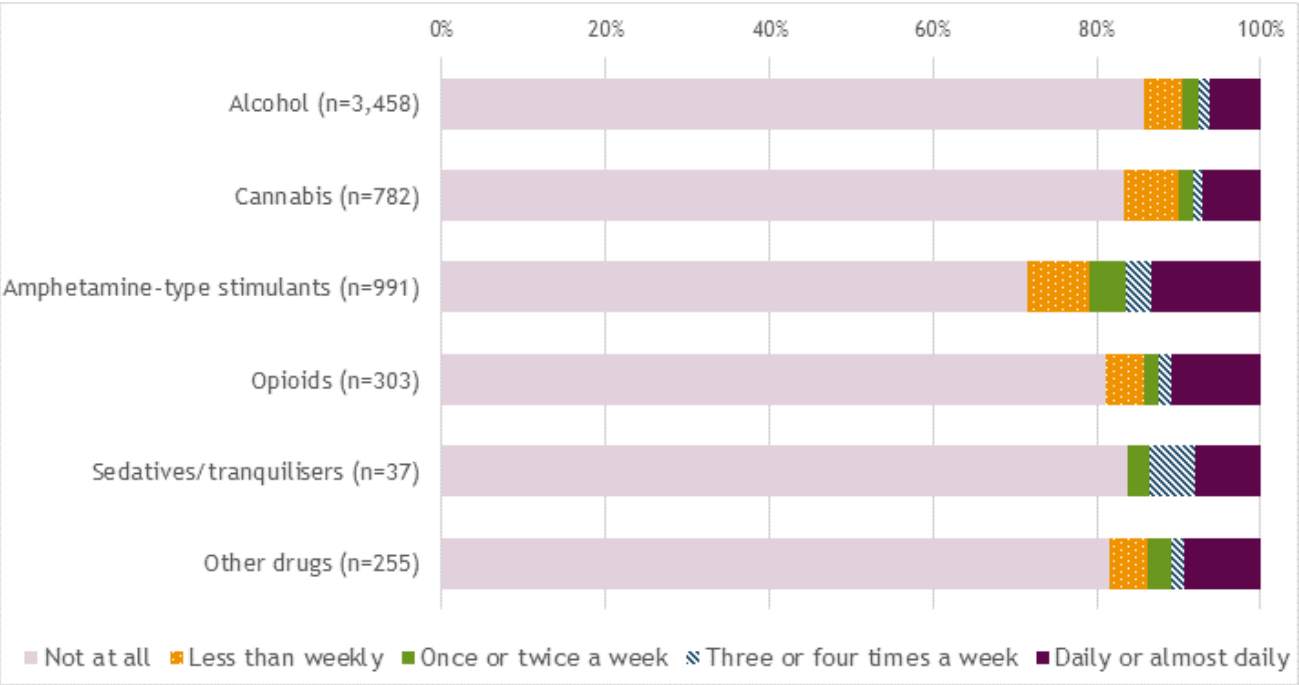
Graph 21 shows engagement with work and other activities. Over 40 per cent of tāngata whai ora who specify amphetamine type stimulants or opioids as main substance of concern do not appear to engage in work, recreational activities, study or care giving at all.

Graph 21: Distribution of Q16 (engagement with work, study or care giving) responses at ADOM treatment start collection, by substance of main concern, October 2015 – September 2016



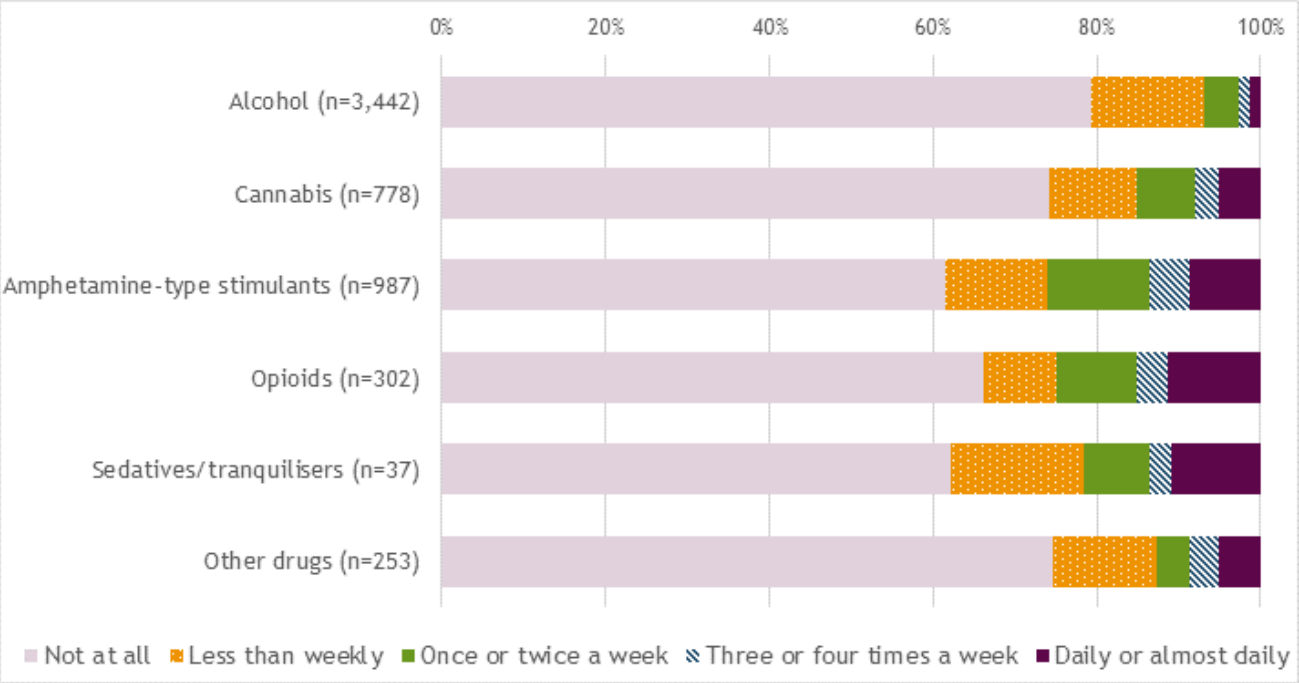
Graph 22 shows housing difficulties. Tāngata whai ora who specify amphetamine type stimulants as main substance of concern have the most problems with housing, 28 per cent indicating some difficulties.

Graph 22: Distribution of Q17 (housing problems) responses at ADOM treatment start collection, by substance of main concern, October 2015 – September 2016



Graph 23 shows how often tāngata whai ora say they have engaged in criminal and illegal activity in the past four weeks. Tāngata whai ora who specify amphetamine-type stimulants or opioids as the main substance of concern say they engage in criminal activity more often.

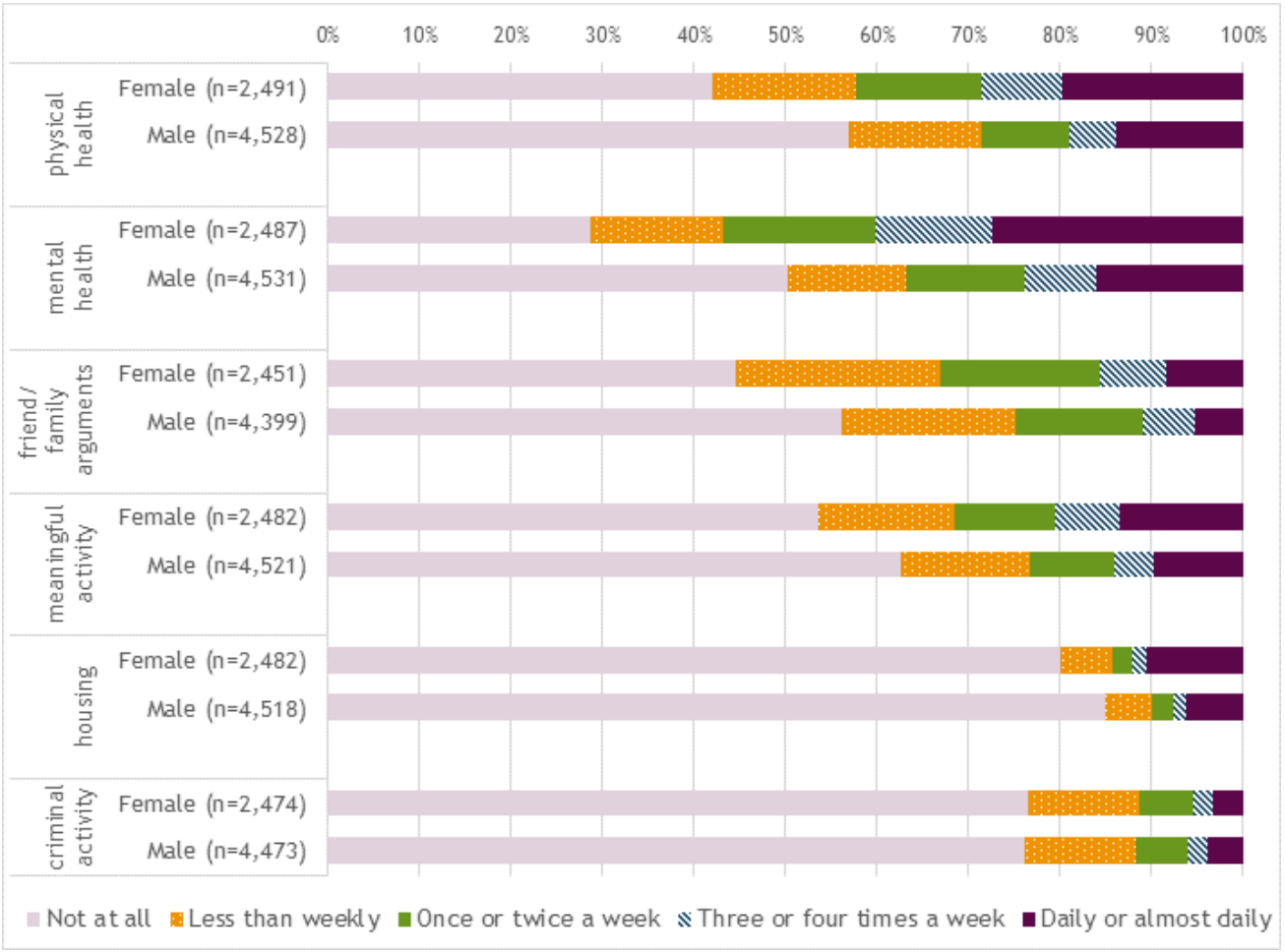
Graph 23: Distribution of Q18 (criminal and illegal activity) responses at ADOM treatment start collection, by substance of main concern, October 2015 – September 2016



Lifestyle and wellbeing – by gender and ethnicity

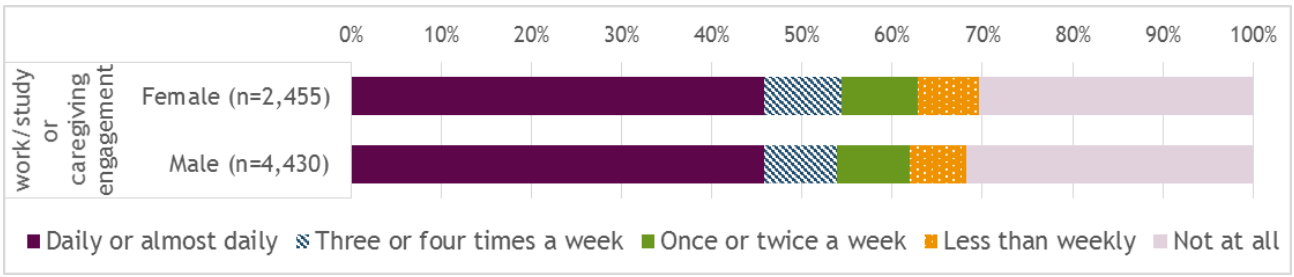
Graph 24 shows females are more likely to report lifestyle and wellbeing concerns, particularly in relation to mental and physical health.

Graph 24: Distribution of lifestyle and wellbeing responses at ADOM treatment start collections, by gender, October 2015 – September 2016



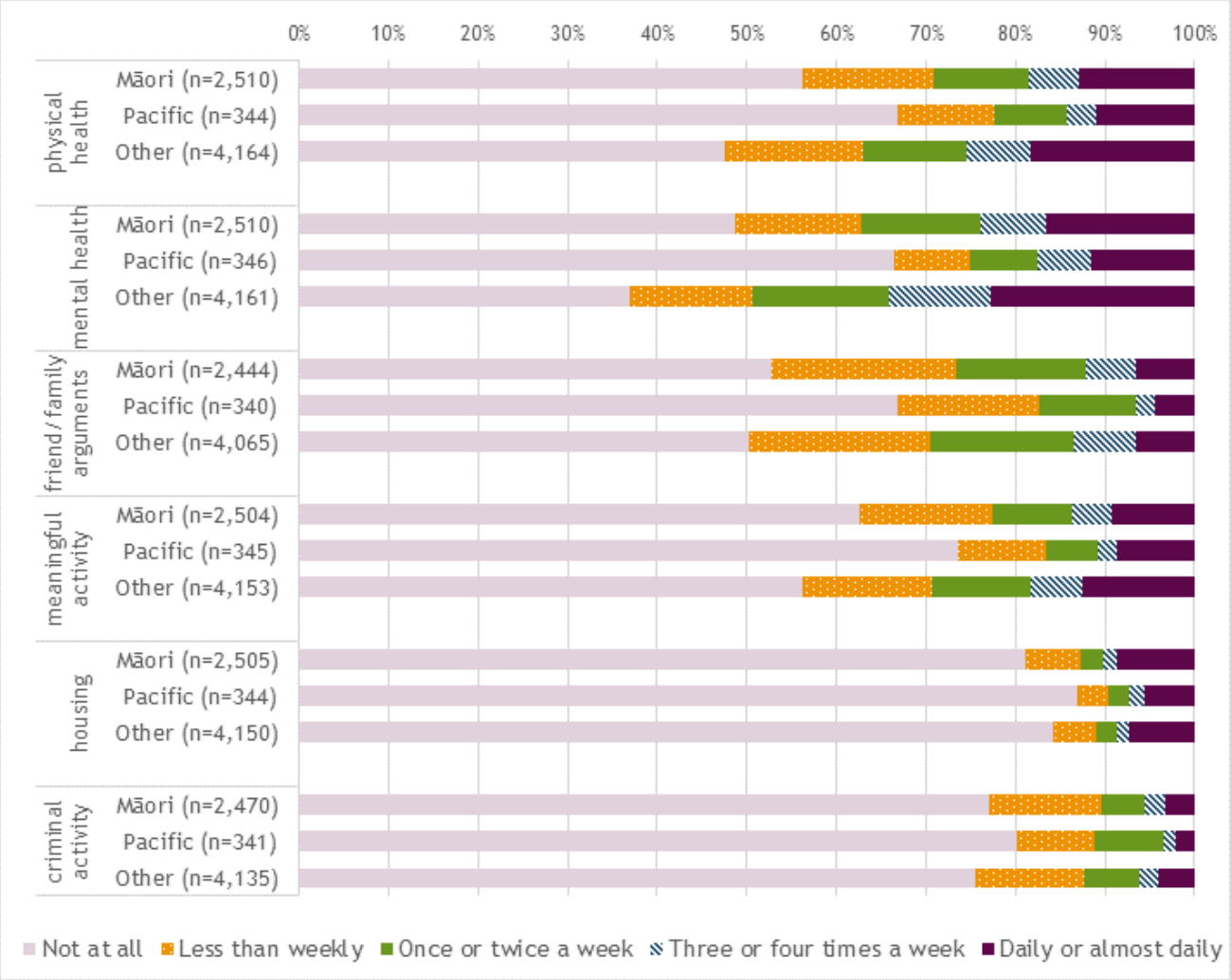
Graph 25 shows little difference between males and females in regards to engagement with work, study or caregiving activities.

Graph 25: Distribution of lifestyle and wellbeing responses Q16 (engagement with work, study or care giving) at ADOM treatment start collections, by gender, October 2015 – September 2016



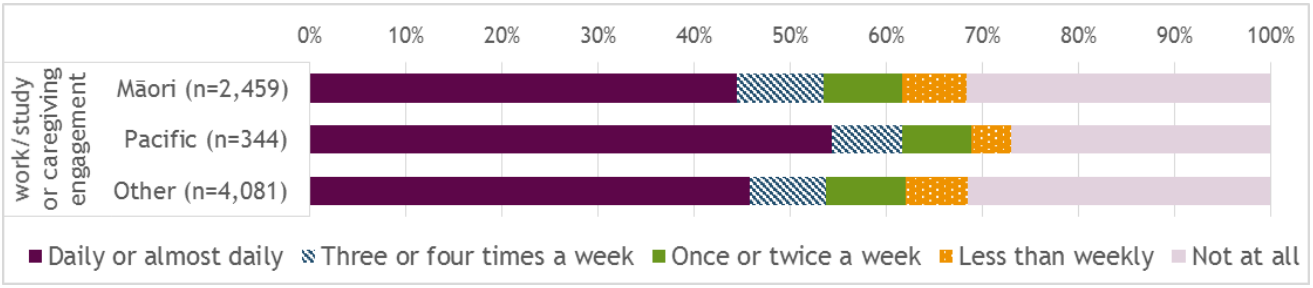
Graph 26 shows the response to section 2 ADOM lifestyle and wellbeing questions by ethnic group. Māori and Pacific people appear to have less lifestyle and wellbeing concerns compared to other ethnic groups. However, Māori have more concerns than Pacific peoples, particularly in relation to mental and physical health.

Graph 26: Distribution of lifestyle and wellbeing responses at ADOM treatment start collections, by ethnicity, October 2015 - September 2016



Graph 27 indicates there are few differences in engagement with work, study or caregiving among tāngata whai ora in different ethnic groups.

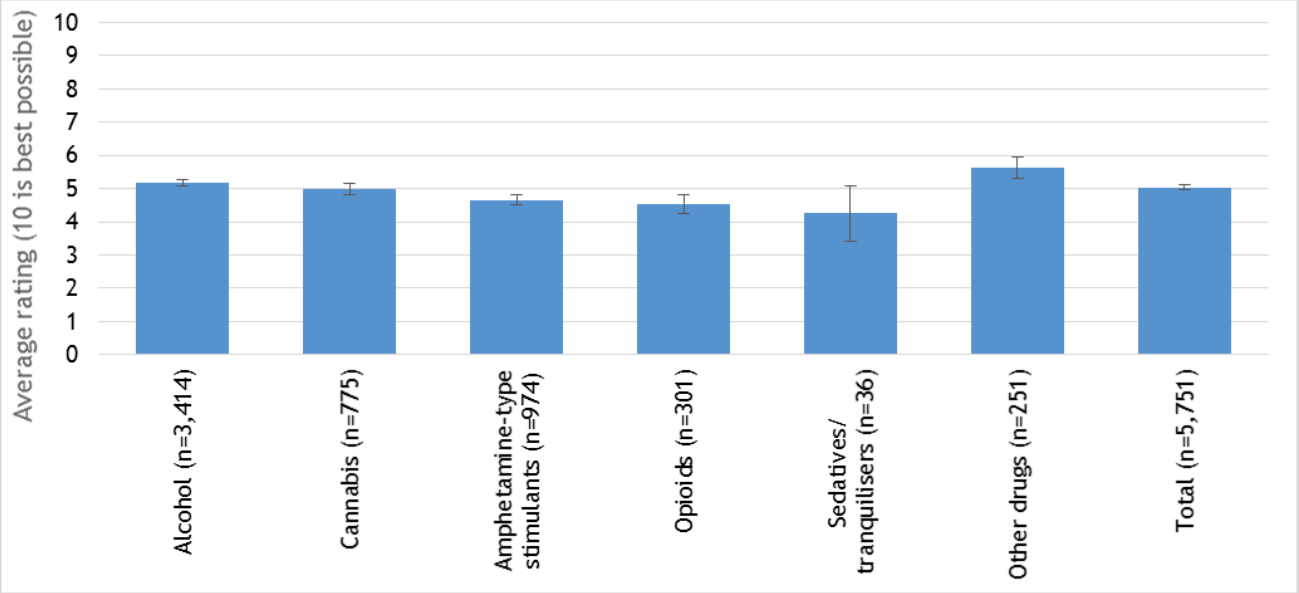
Graph 27: Distribution of lifestyle and wellbeing responses Q16 (engagement with work, study or caregiving) at ADOM treatment start collections, by ethnicity, October 2015 - September 2016



ADOM treatment start collections recovery analysis

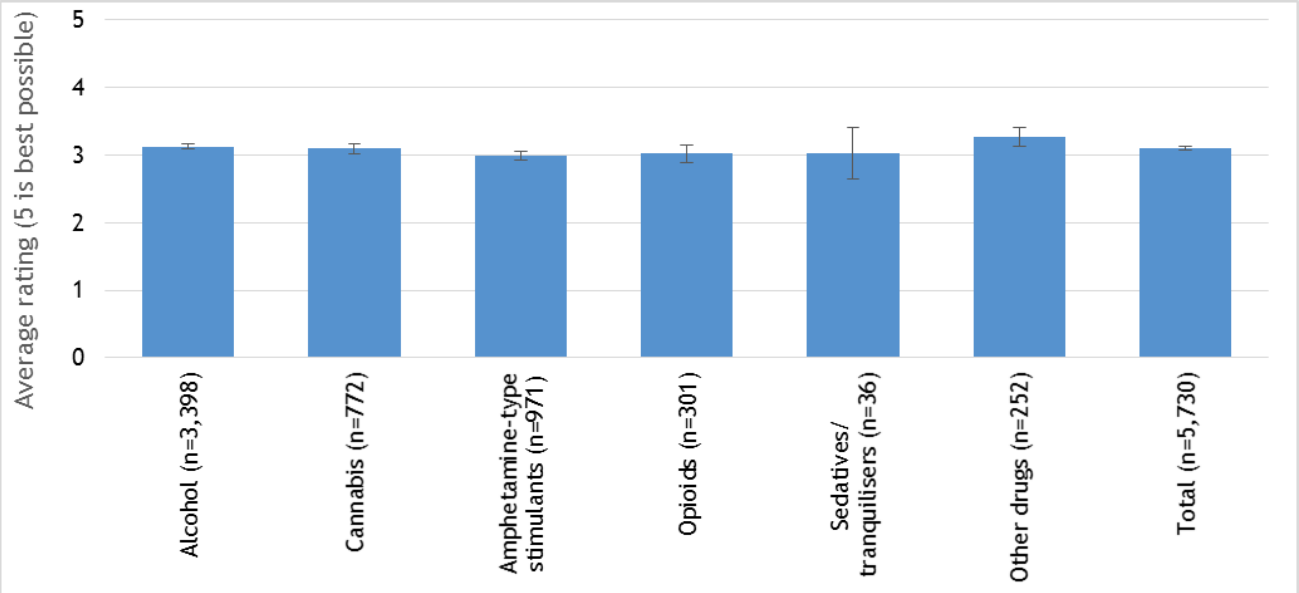
Graph 28 shows how close tāngata whai ora feel they are to where they want to be in their recovery at treatment start. A relatively even distribution suggests that whatever the stated substance of concern, at the start of treatment, tāngata whai ora have similar feelings of 'distance' from recovery.

Graph 28: Average self-rating of rates of closeness to desired recovery (Q19) at ADOM treatment start collection, by substance of main concern, October 2015 – September 2016



Graph 29 shows how satisfied people are with progress toward their recovery goals.

Graph 29: Average self-rating of how satisfied tāngata whai ora are with progress towards achieving their recovery goals (Q20) at ADOM treatment start collection, by substance of main concern, October 2015 – September 2016



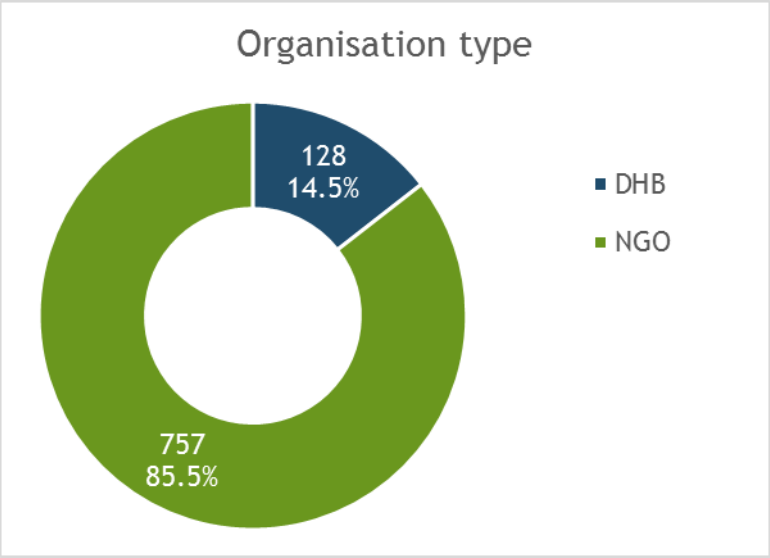
Part 3: Outcomes (matched pairs)

There are 885 matched pairs of treatment start and treatment end ADOM collections. Please note:

- tāngata whai ora starting treatment during this year may still be in treatment and would not be included in matched pairs
- did not attend (DNA) drop offs would exclude a significant amount of potential pairs

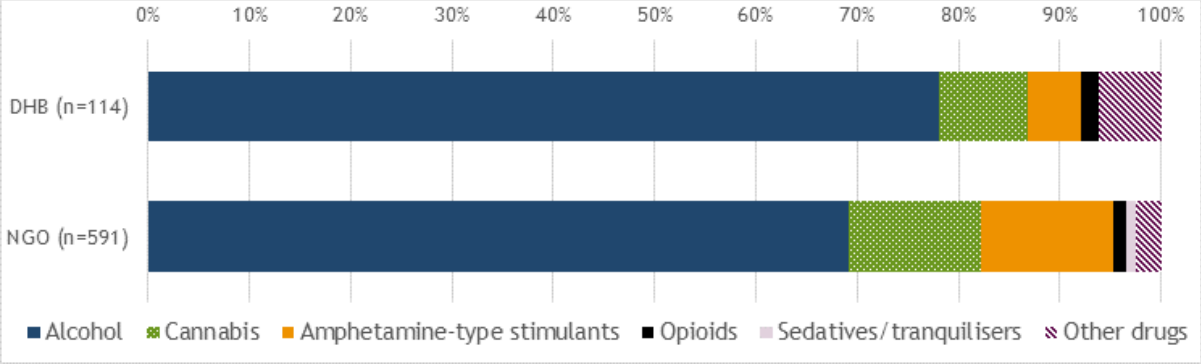
It is of interest that NGOs have a significantly higher percentage of treatment completion matched pairs than DHBs, this indicates that DHBs keep people in treatment longer than NGOs, perhaps due to case complexity[15].

Graph 30: Percentage of ADOM matched pairs by organisation type, October 2015 – September 2016



Graph 31 shows the percentage of matched pairs by main substance of concern. Compared to all ADOM collections at treatment start, matched pairs were more likely to report alcohol as the main substance of concern, and less likely to report and amphetamine type stimulants.

Graph 31: Percentage of ADOM matched pairs by main substance of concern, by organisation type, October 2015 – September 2016



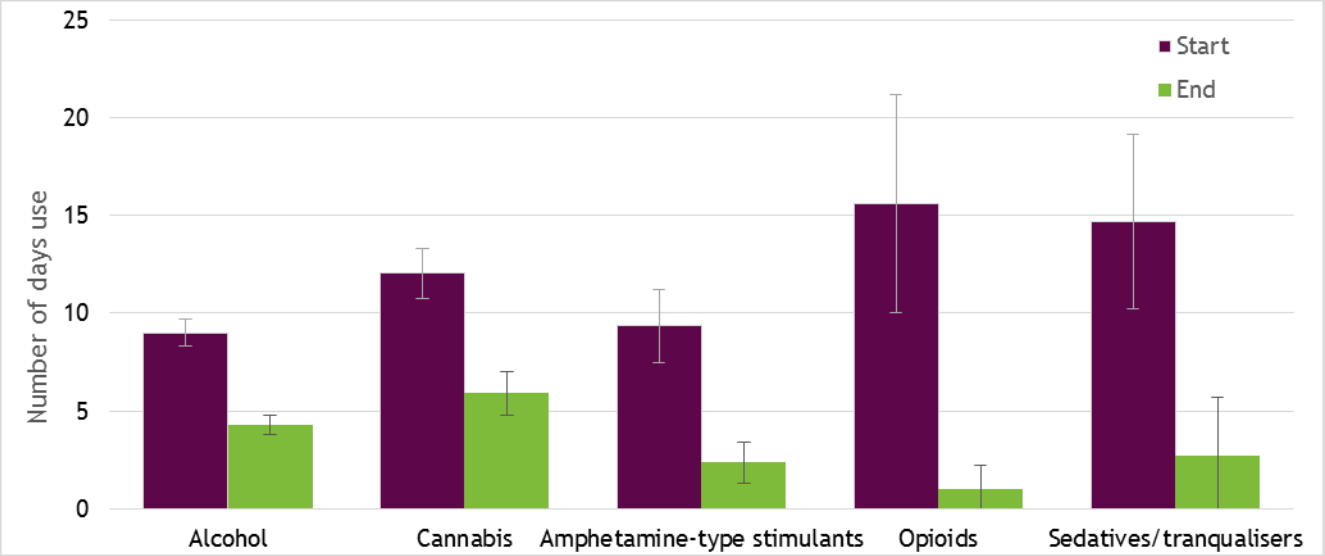
[15] DHB's are often funded to work with moderate to severe, where NGO's are often funded to work with mild to moderate complexity.

ADOM matched pairs by substance of concern

Due to the number of matched pairs currently available, treatment start and treatment end changes have been calculated for any substance use stated at treatment start, not specifically for main substance of concern. When more data is available, further analysis will be possible.

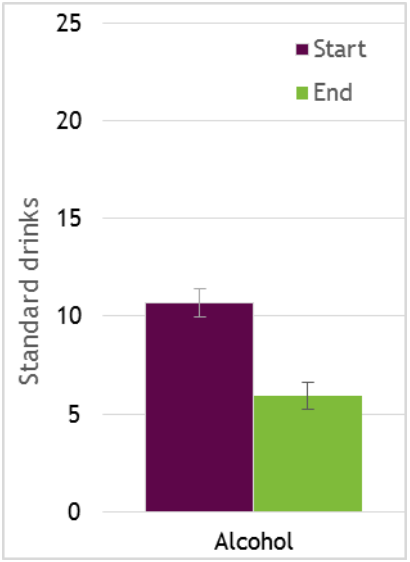
Graph 32 shows change in substance use between treatment start and treatment end. Results show a decrease in substance use between treatment start and treatment end. As an example, at treatment start the average number of days of alcohol use was 9.0 days compared to 4.3 days at treatment end. This indicates an average reduction in days of use by 4.7 days. Table 5 provides a full list of changes in substance use.

Graph 32: Days of substance use in the past four weeks at ADOM treatment start and treatment end for those matched pairs with substance use as treatment start, October 2015 - September 2016



Graph 33 shows a reduction in the number of standard drinks used in a typical drinking day (from 10.7 to 5.9), by tāngata whai ora, from treatment start to treatment end.

Graph 33: Standard drinks used in a typical drinking day at ADOM treatment start and treatment end for those matched pairs with use at treatment start, October 2015 – September 2016



Graph 34 shows a slight reduction in tobacco/cigarette use (from 12.4 to 10.4). While smoking cessation is not the primary aim of AOD services (it may be addressed while in treatment), it will be interesting to explore changes for those that specify cigarettes/tobacco as main substance of concern once this field is permitted in PRIMHD.

Graph 34: Average number of tobacco/cigarettes smoked on average per day at ADOM treatment start and treatment end for those matched pairs with use at treatment start, October 2015 – September 2016

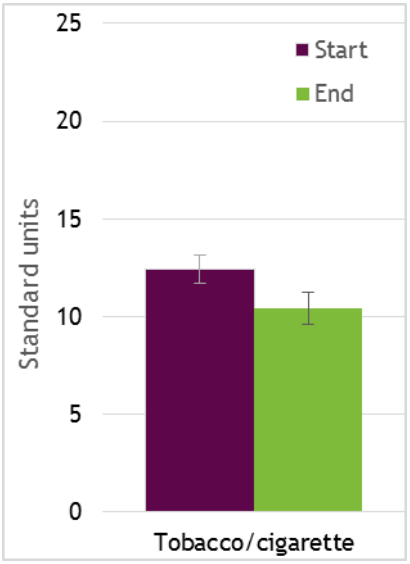


Table 5 provides analysis of the effect of treatment on substance use from treatment start to treatment end. Alcohol (days and amounts), cannabis, amphetamine-type stimulants and opioids all show significant improvement from treatment start to treatment end. Overall, large decreases in use were reported for amphetamine-type stimulants, opioids and sedatives.

Table 5: Average days of substance use amongst those with use at treatment start, with confidence intervals, by ADOM treatment start, treatment end and outcome, matched pairs, October 2016 - September 2016

Question	Start mean	End mean	Outcome (Start minus end mean)	Cohen's d (effect size with 95% CI)	Effect of treatment
Q1: Alcohol days of use	9.0 *(n=596)*	4.3 *(n=596)*	4.7	0.64 (0.52-0.76)	Medium
Q2: Alcohol number of standard drinks consumed in a typical days use	10.7 *(n=582)*	5.9 (n=*579)*	4.8	0.55 (0.43-0.66)	Medium
Q3: Cannabis number of days	12.0 *(n=263)*	5.9 *(n=261)*	6.1	0.63 (0.45-0.80)	Medium
Q4: Amphetamine-type stimulant number of days	9.4 *(n=91)*	2.4 *(n=91)*	7.0	0.96 (0.65-1.27)	Large
Q5: Opioid number of days	15.6 *(n=20)*	1.0 *(n=20)*	14.6	1.69 (0.94-2.38)	Large
Q6: Sedatives/tranquilisers number of days	14.7 *(n=28)*	2.8 *(n=28)*	11.9	1.23 (0.64-1.78)	Large
Q8: Cigarettes - number smoked on average per day	12.4 *(n=549)*	10.4 *(n=535)*	2.0	0.21 (0.09-0.33)	Small
Q10: Number of days injecting drugs	12.6 *(n=21)*	1.1 *(n=21)*	11.5	1.56 (0.85-2.22)	Large

Notes: Cohen (1992)[16] reports the following intervals for d: .2 to .5: small effect; .5 to .8: medium effect; .8 and higher: large effect

Injecting use:

Twenty one people stated that they had been injecting at the start of treatment, of the 21 three people reported sharing equipment. At treatment end five people in this cohort were still injecting and one reporting sharing equipment.

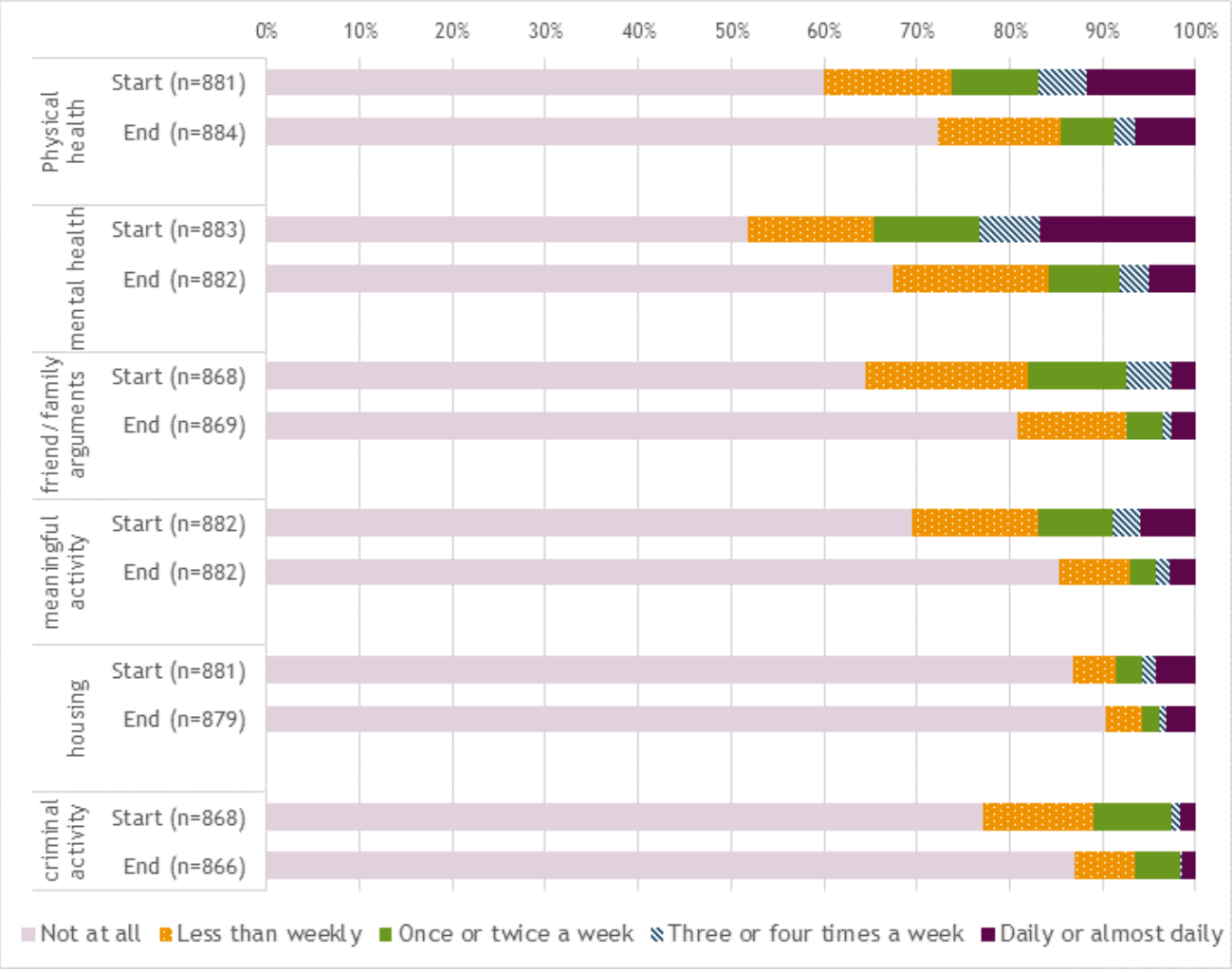
[16] Cohen, J (1992) A Power Primer, Quantitative Methods in Psychology, *Psychologic Bulletin* Vol 112, No.1 155-159.

ADOM matched pairs by lifestyle and wellbeing

Question key:
Q12 How often has your physical health caused problems in your daily life?
Q13 How often has your general mental health caused problems in your daily life?
Q14 How often has your alcohol or drug use led to problems or arguments with friends or family members?
Q15 How often has your alcohol or drug use caused problems with your work or other activities in any of the following: social, recreational, looking after children or other family members, study or other personal activities?
Q17 Have you had difficulties with housing or finding somewhere stable to live?
Q18 How often have you been involved in any criminal or illegal activity such as driving a motor vehicle under the influence of alcohol or drugs, assault, shoplifting, supplying an illicit substance to another person?

Graph 35 shows positive changes between treatment start and treatment end in lifestyle and wellbeing.

Graph 35: Distribution in lifestyle and wellbeing for ADOM treatment start and end for matched pairs, October 2015 - September 2016[17]

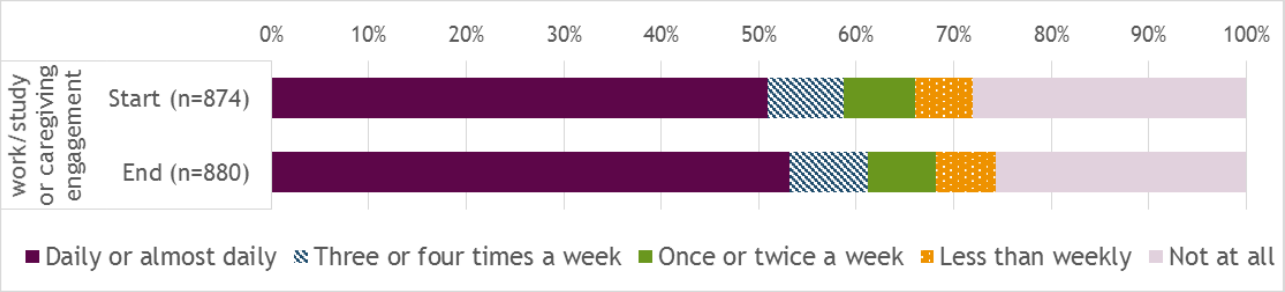


[17] The matched pair total is 885. Some start/end figures and matched pair totals differ because a tangata whai ora may chose not to answer one of the questions at start or end, but still be within total data missing rules.

Question key:
Q16 How often have you engaged in any of the following: paid work, voluntary work, study, looking after children or other caregiving activities?

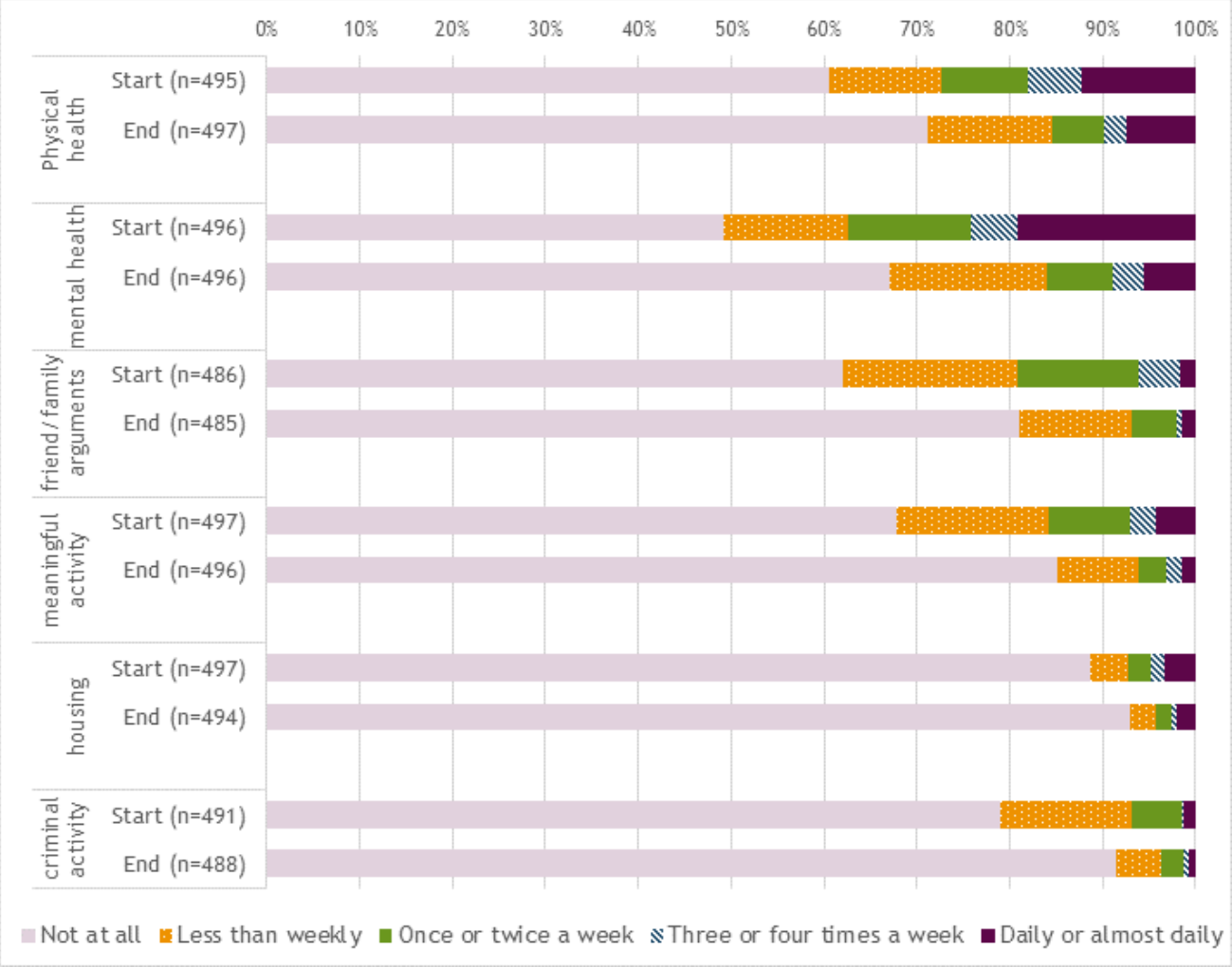
Graph 36 shows a small but positive change between treatment start and treatment end in employment, study and caregiving.

Graph 36: Average improvement in lifestyle and wellbeing between ADOM treatment start and end for Q16 matched pairs, October 2015 - September 2016

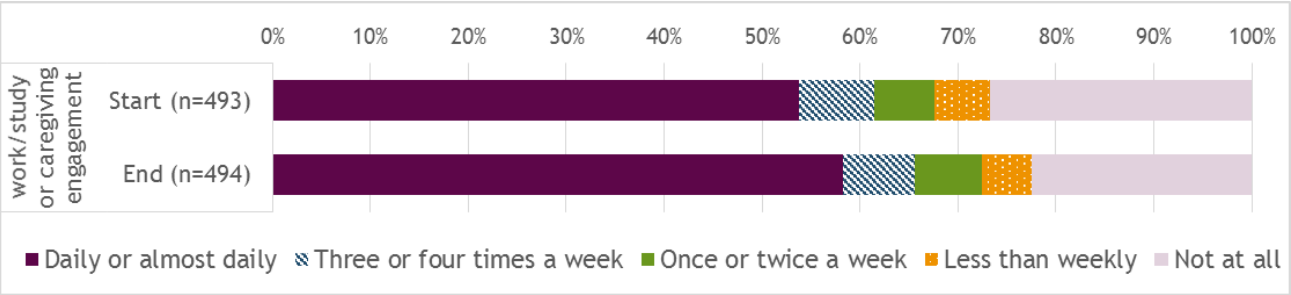


Graph 37 and 38 show change in lifestyle and wellbeing scores where alcohol is the main substances of concern.

Graph 37: Distribution in lifestyle and wellbeing for ADOM treatment start and end for matched pairs, alcohol main substance of concern at treatment start, October 2015 - September 2016

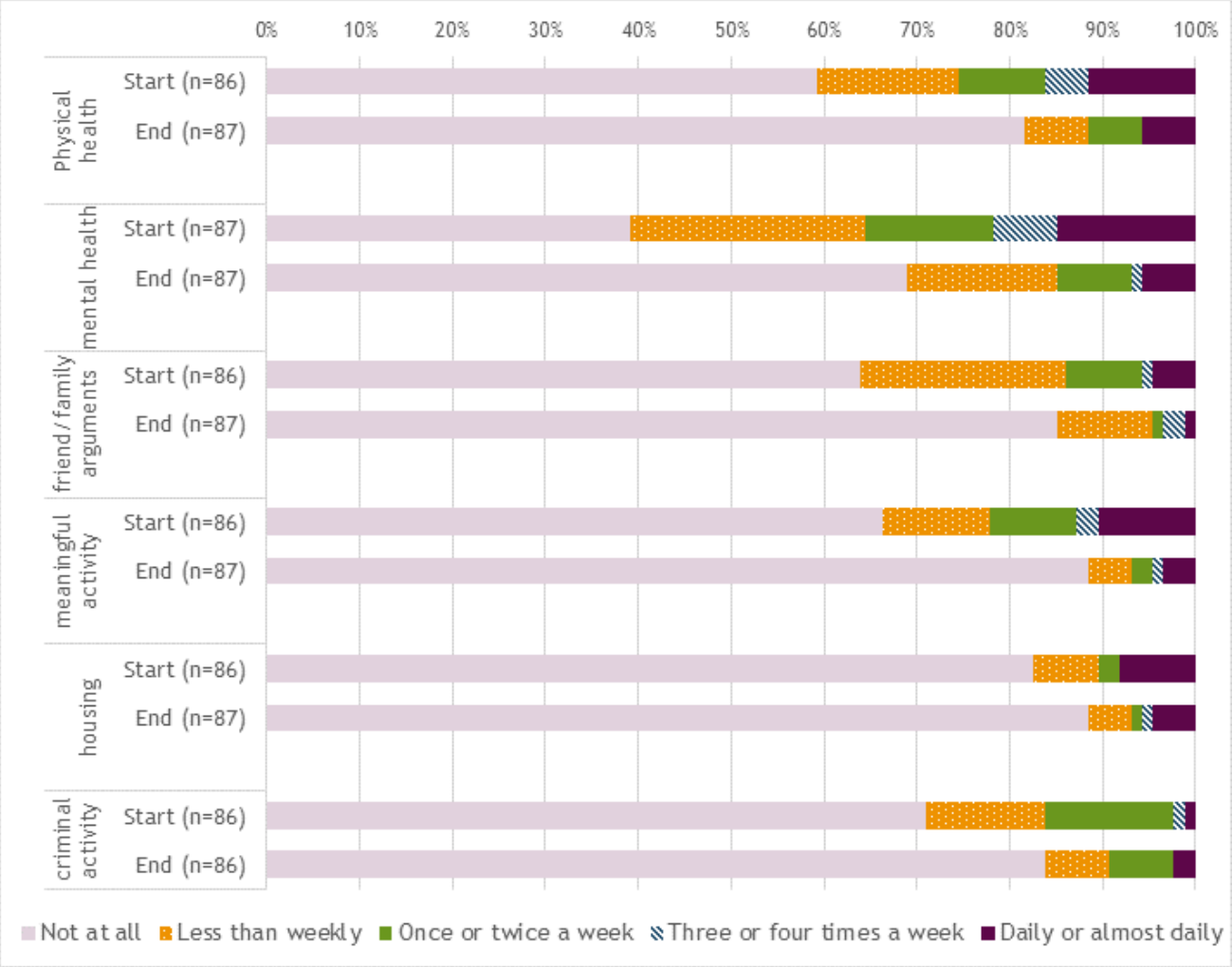


Graph 38: Average improvement in lifestyle and wellbeing between ADOM treatment start and end for Q16 matched pairs, alcohol main substance of concern at treatment start, October 2015 - September 2016

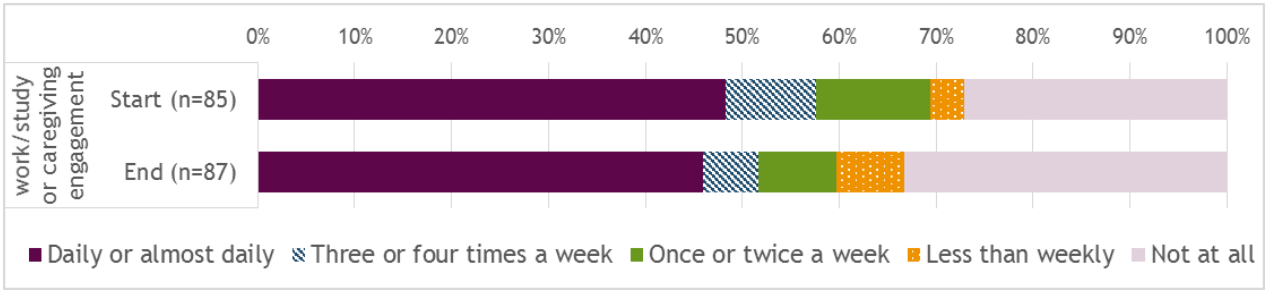


Graphs 39 and 40 show change in lifestyle and wellbeing scores where cannabis is the main substance of concern.

Graph 39: Distribution in lifestyle and wellbeing for ADOM treatment start and end for matched pairs, cannabis main substance of concern at treatment start, October 2016 - September 2016

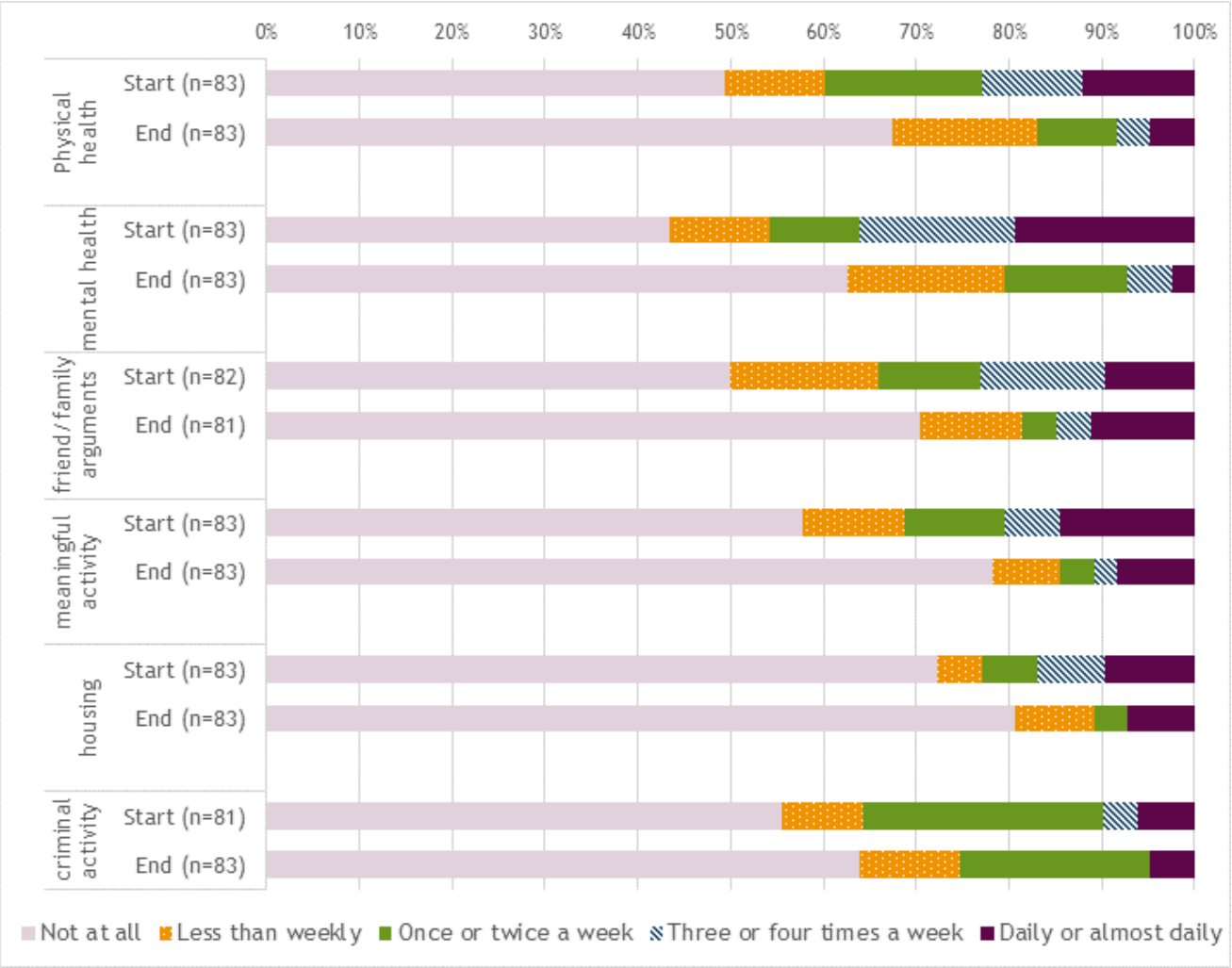


Graph 40: Average improvement in lifestyle and wellbeing between ADOM treatment start and end for Q16 matched pairs, cannabis main substance of concern at treatment start, October 2016 - September 2016

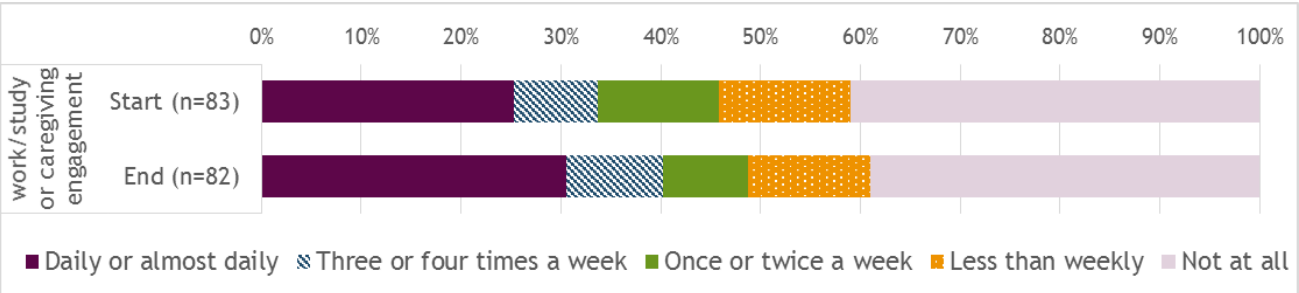


Changes in lifestyle and wellbeing in relation to use of amphetamine-type stimulants is shown in Graphs 41 and 42.

Graph 41: Distribution in lifestyle and wellbeing for ADOM treatment start and end for matched pairs, amphetamine-type stimulants main substance of concern at treatment start, October 2016 - September 2016



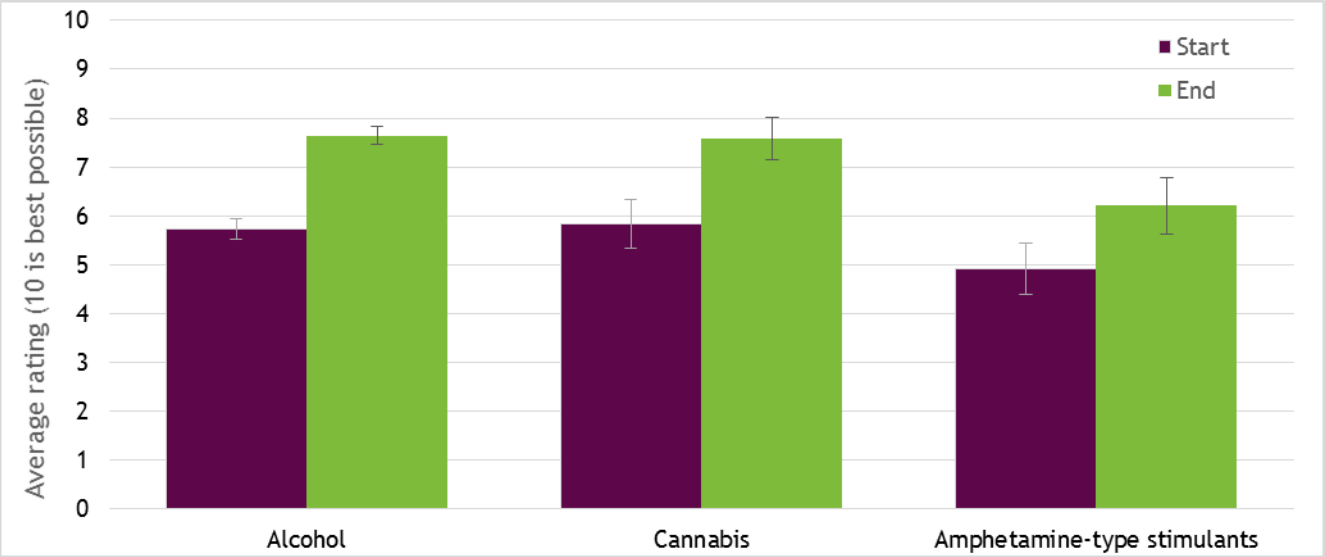
Graph 42: Average improvement in lifestyle and wellbeing between ADOM treatment start and end for Q16 matched pairs, amphetamine-type stimulants main substance of concern at treatment start, October 2016 - September 2016



ADOM matched pairs by recovery

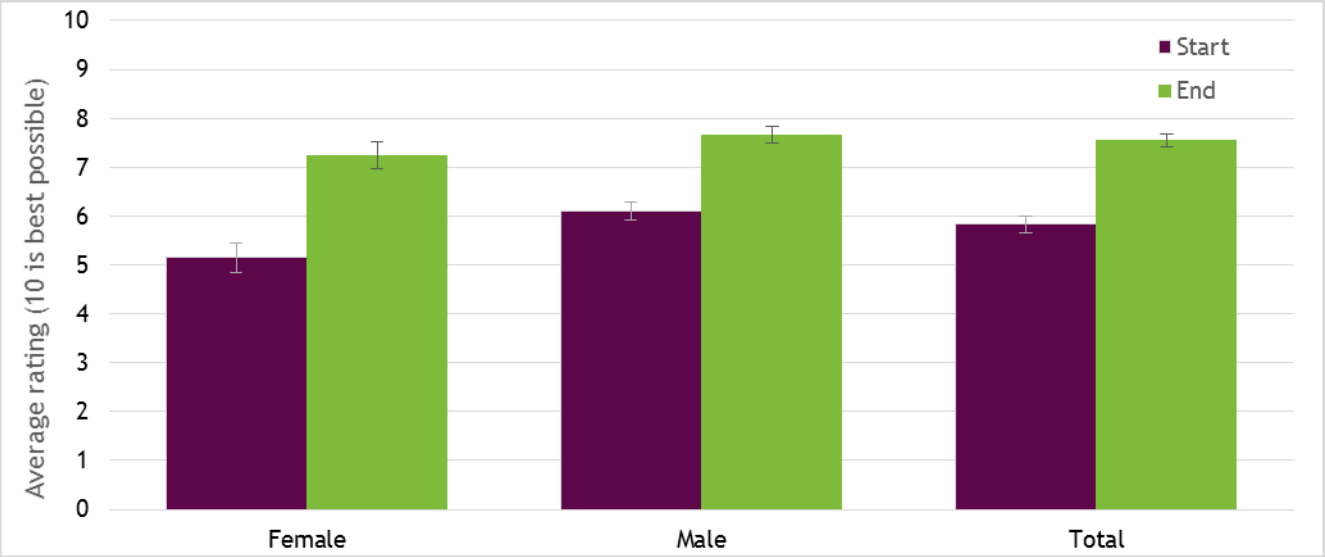
Graph 43 shows positive changes from treatment start to treatment end in how tāngata whai ora see themselves in relation in how close they are to where they want to be in their recovery.

Graph 43: Average self-rating of rates of closeness to desired recovery at ADOM treatment start and end collection, by substance of main concern, October 2016 - September 2016



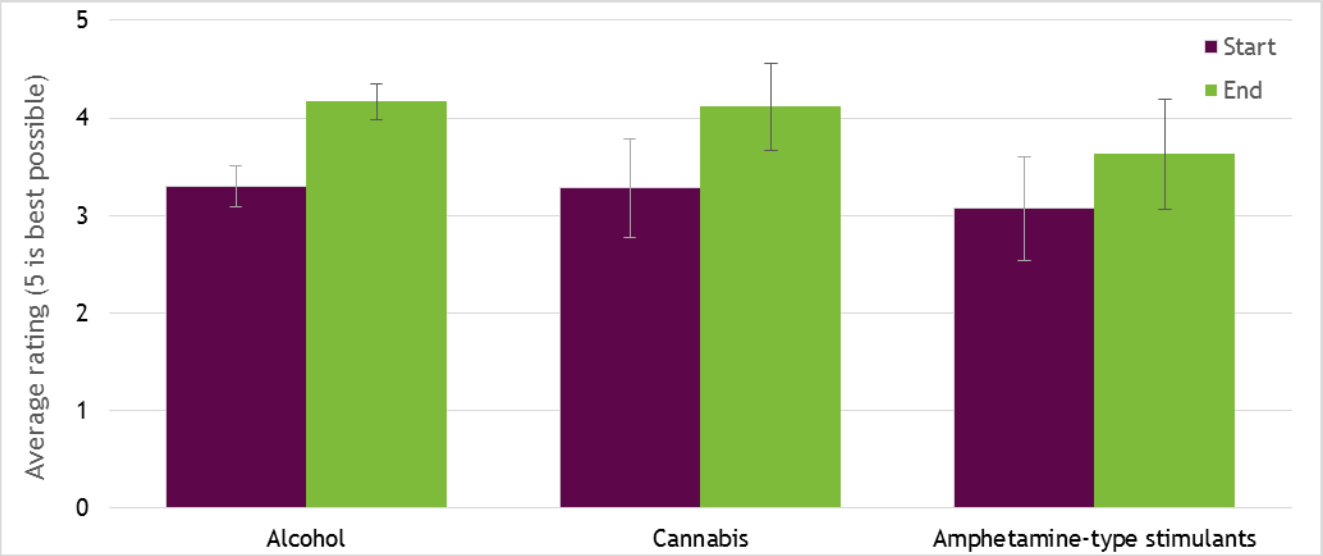
Graph 44 shows positive change from treatment start to treatment end in how tāngata whai ora see themselves in relation in how close they are to where they want to be in their recovery, by gender. Males at the start of treatment state they are closer to recovery than females, this becomes more even at treatment end.

Graph 44: Average self-rating of rates of closeness to desired recovery at ADOM treatment start and end collection, by gender, October 2016 - September 2016



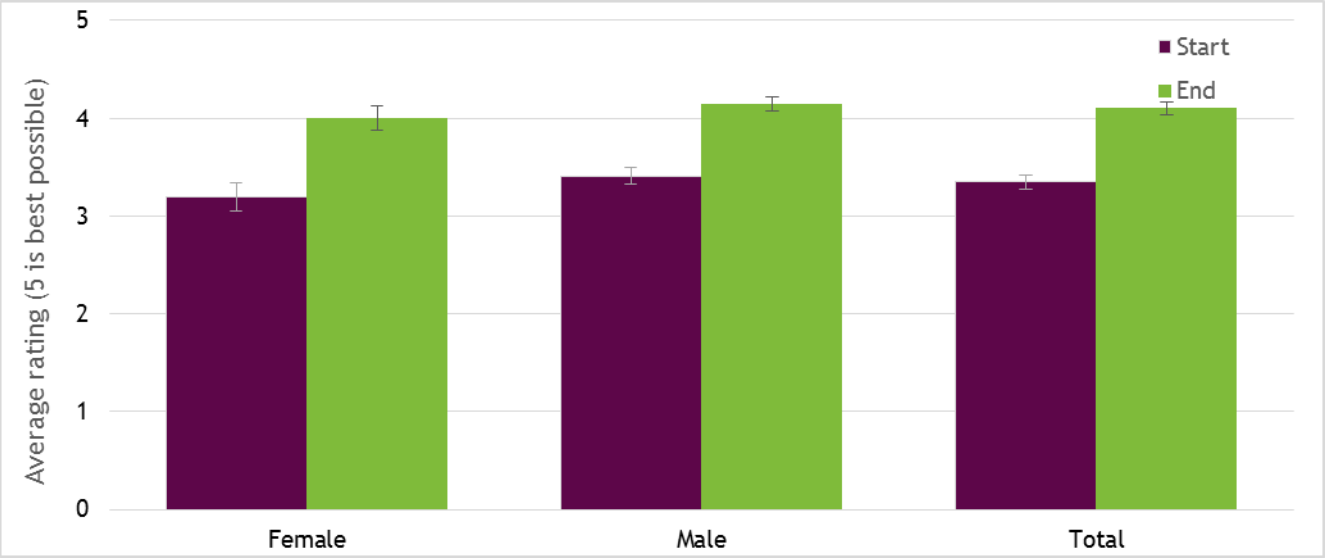
Graph 45 shows positive change from treatment start to treatment end in how tāngata whai ora regard their progress towards their recovery goals. Those using amphetamine-type stimulants show less progress toward recovery goals at treatment start and treatment end than those using alcohol or cannabis.

Graph 45: Average self-rating of how satisfied tāngata whai ora are with progress towards achieving their recovery goals at ADOM treatment start and end collection, by substance of main concern, October 2016 - September 2016



Graph 46 shows positive change from treatment start to treatment end in how tāngata whai ora regard their progress towards their recovery goals, by gender. There is little difference in satisfaction with progress between males and females.

Graph 46: Average self-rating of how satisfied tāngata whai ora are with progress towards achieving their recovery goals at ADOM treatment start and end collection, by gender, October 2016 - September 2016

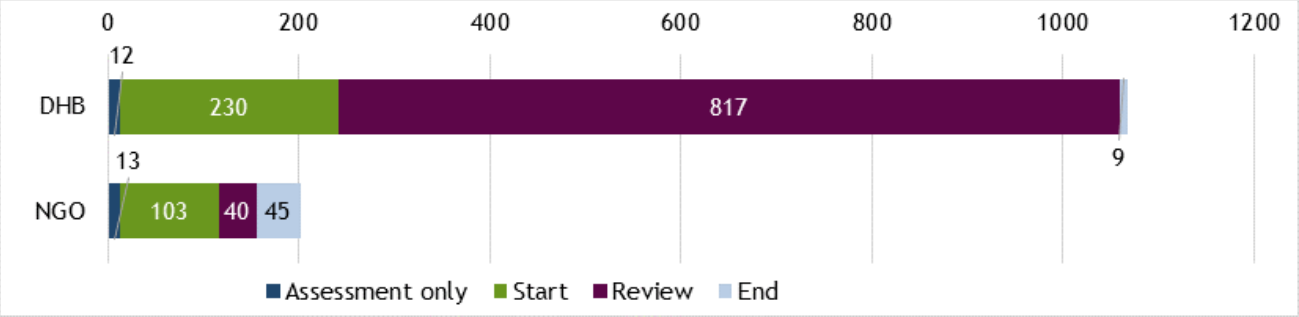


Part 4: Opioid substitution services (OST)

All OST statistics are included in the report thus far[18], and are detailed here in part four as specific information that can be disaggregated from the main report. There are insufficient matched pair numbers at this stage to include further analysis.

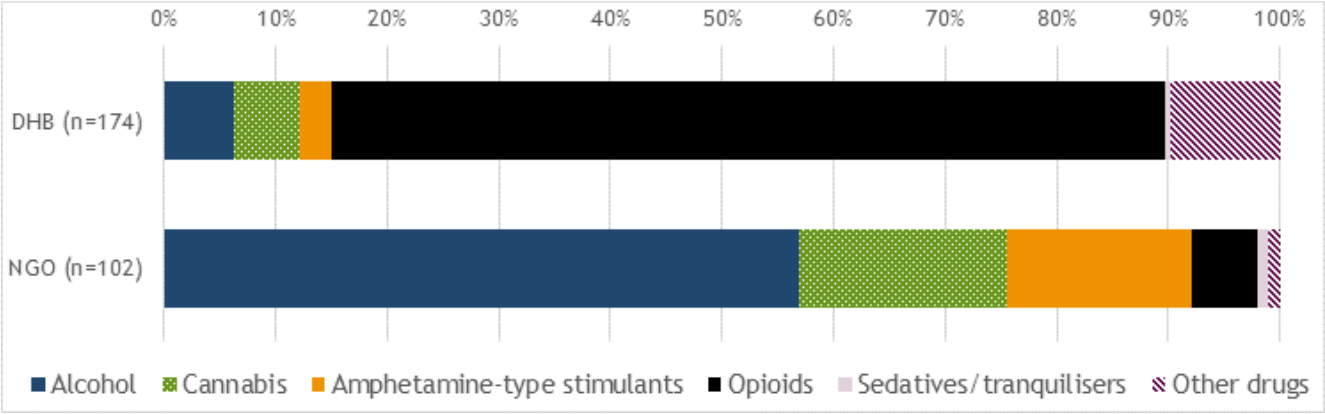
Graph 47 shows total ADOM collections by DHB and NGO. Please note there are five DHB[19] opioid substitution services that are not yet submitting ADOM data and one using a different outcome measure.

Graph 47: Number of ADOM collections for opioid substitution services, by reason for collection and organisation type, October 2015 – September 2016



Opioids feature as specified main substance of concern much more prominently in DHB services, as all but one OST service sit within DHBs.

Graph 48: Percentage of ADOM treatment starts by main substance of concern, by organisation type, October 2015 – September 2016

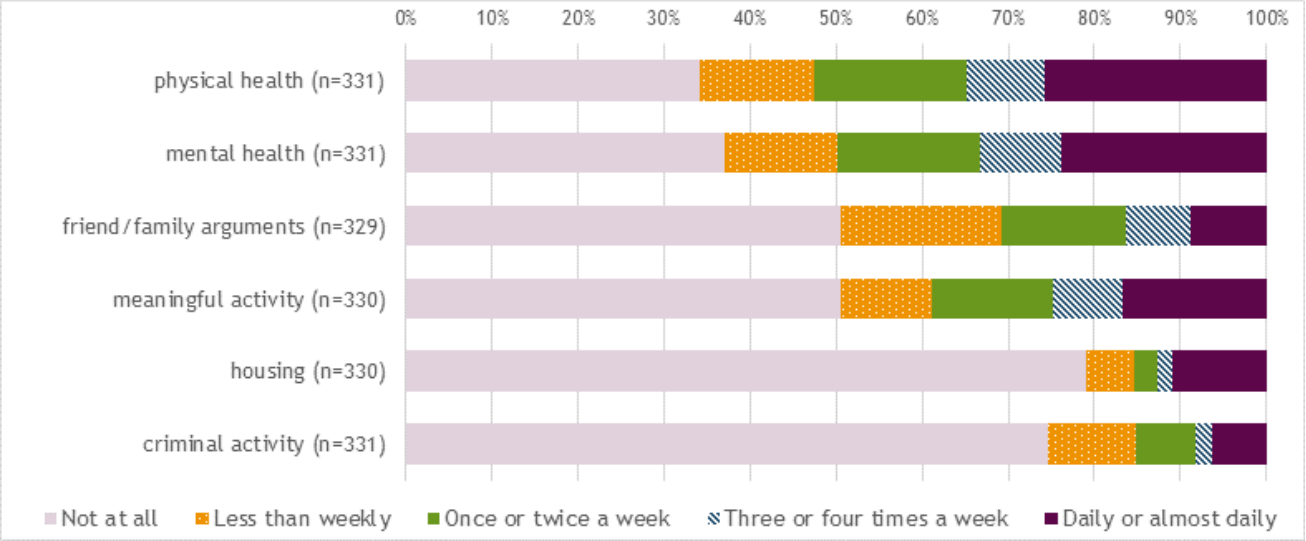


[18] It was agreed by the ADOM reports advisory group that OST presented specific challenges in reporting, and that outcomes for this group may need to be highlighted specifically in all reports. Those challenges to reporting include length of time in services and recording changes in a small reporting period.

[19] Until those DHBs submit ADOM information to PRIMHD we can only make an estimate based on new referrals in the time period, which is around 700 tāngata whai ora. This does not include existing tāngata whai ora that may have a 'teratment start other'.

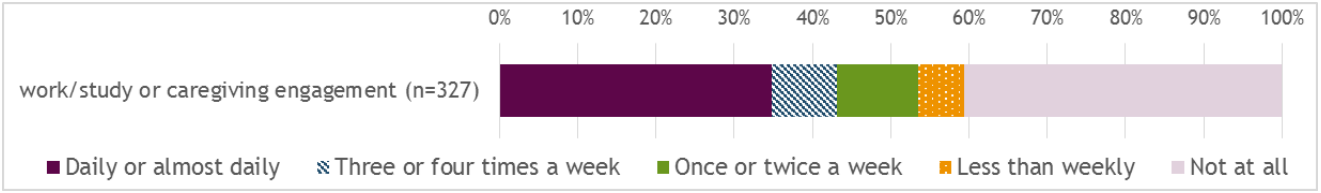
Graph 49 shows physical and mental health were the areas most affected for tāngata whai ora in OST services.

Graph 49: Distribution of lifestyle and wellbeing responses at ADOM treatment start collections for opioid substitution services, October 2015 – September 2016



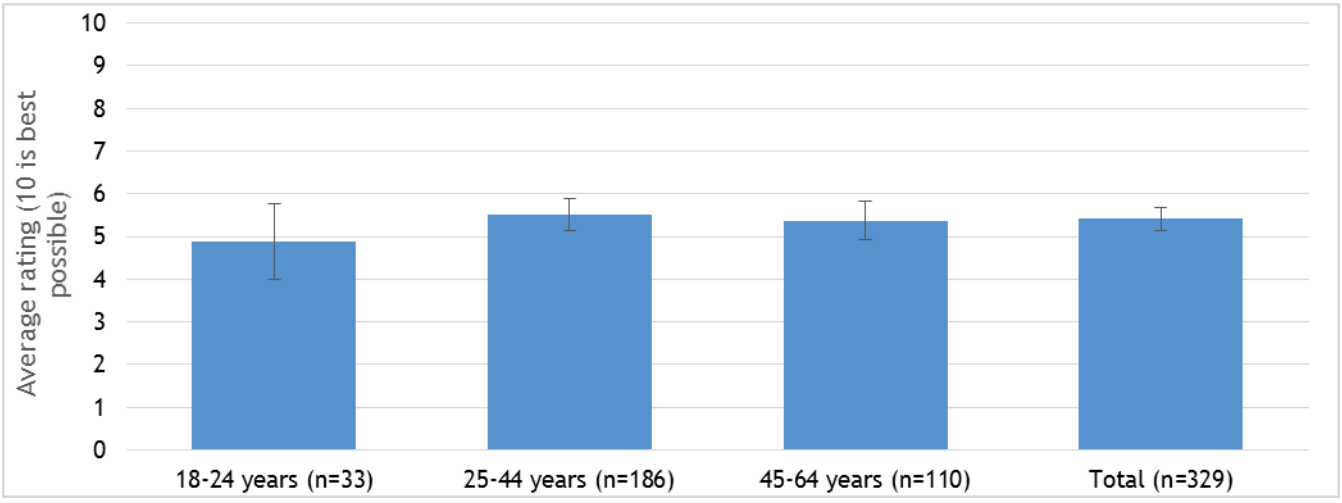
Graph 50 shows that nearly 60 per cent of tāngata whai ora accessing OST service are working, studying or care giving, with 35 per cent were doing so daily or nearly daily.

Graph 50: Distribution of lifestyle and wellbeing responses at ADOM treatment start collections for opioid substitution services, October 2015 – September 2016



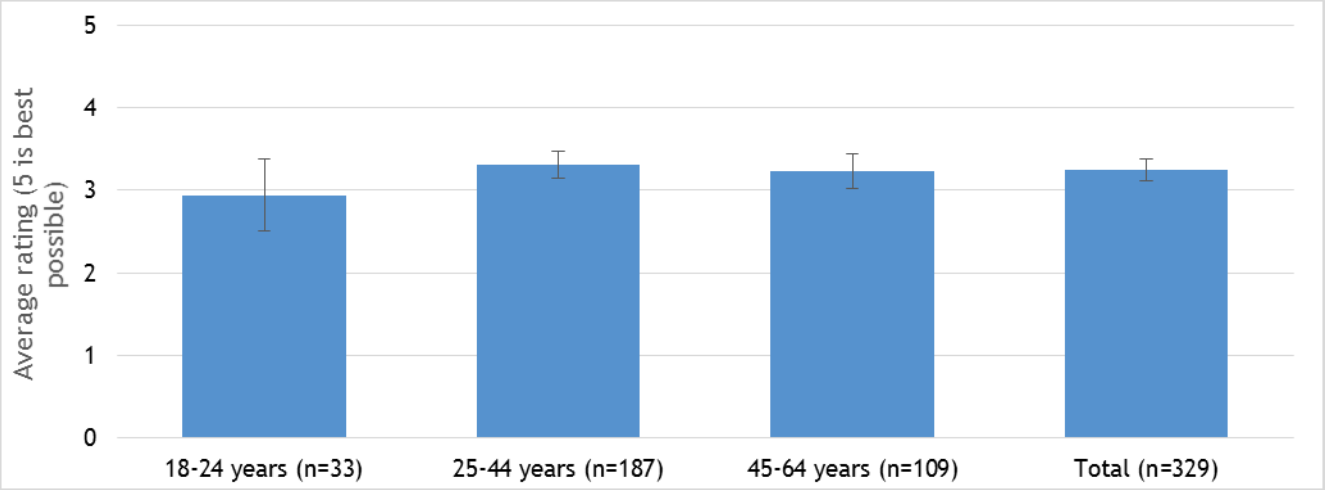
Graph 51 shows few differences in closeness to desired recovery, by age group.

Graph 51: Average self-rating of rates of closeness to desired recovery at ADOM treatment start collection for opioid substitution services, by age group, October 2015 – September 2016



Graph 52 shows there is a similar satisfaction rating with recovery goal progress in each age group.

Graph 52: Average self-rating of how satisfied tāngata whai ora are with progress towards achieving their recovery goals at ADOM treatment start collection for opioid substitution services, by age group, October 2015 – September 2016



Appendix 1: Full tables

Ctrl+Click underlined words to view corresponding graphs.

Appendix Table 1: Number and distribution of substance of main concern, at ADOM treatment start collections by organisation type, October 2015 – September 2016

Substance of main concern	DHB		NGO		Total	
	%	Number	%	Number	%	Number
Alcohol	56.0%	*881*	60.6%	*2,596*	59.4%	*3,477*
Cannabis	12.5%	*196*	13.8%	*591*	13.4%	*787*
Amphetamine-type stimulants	12.6%	*198*	18.6%	*796*	17.0%	*994*
Opioids	13.8%	*217*	2.0%	*87*	5.2%	*304*
Sedatives/tranquilisers	0.6%	*10*	0.6%	*27*	0.6%	*37*
Esctasy	0.0%	*0*	0.1%	*4*	0.1%	*4*
Hallucinogens	0.1%	*1*	0.2%	*7*	0.1%	*8*
Solvents	0.1%	*1*	0.1%	*6*	0.1%	*7*
GHB	0.0%	*0*	0.2%	*8*	0.1%	*8*
Other drug, unspecified	4.4%	*70*	3.8%	*161*	3.9%	*231*
Total	**100.0%**	***1,574***	**100.0%**	***4,283***	**100.0%**	***5,857***

Appendix table 2: Number and distribution of substance of main concern at ADOM treatment start collections, by gender, October 2015 - September 2016

Gender		Alcohol	Cannabis	Amphetamine-type stimulants	Opioids	Sedatives/ tranquilisers	Other drugs	Total
Female	%	57.8%	10.8%	19.8%	6.7%	1.1%	3.9%	
	n	*1,230*	*229*	*421*	*143*	*24*	*82*	*2,129*
Male	%	60.3%	15.0%	15.4%	4.3%	0.3%	4.7%	
	n	*2,247*	*558*	*573*	*161*	*13*	*176*	*3,728*

This table correlates to information in Graph 12.

Appendix table 3: Number and distribution of substance of main concern at ADOM treatment start collections, by age group, October 2015 – September 2016

Age group		Alcohol	Cannabis	Amphetamine-type stimulants	Opioids	Sedatives/ tranquilisers	Other drugs	Total
18-24 years	%	48.2%	25.0%	16.4%	2.6%	0.3%	7.5%	
	n	*536*	*278*	*183*	*29*	*3*	*84*	*1,113*
25-44 years	%	56.2%	12.3%	21.4%	5.6%	0.5%	4.0%	
	n	*1,876*	*412*	*713*	*186*	*17*	*134*	*3,338*
45-64 years	%	74.7%	7.2%	7.4%	6.6%	1.2%	2.9%	
	n	*989*	*95*	*98*	*88*	*16*	*38*	*1,324*
65 years and over	%	92.7%	2.4%	0.0%	1.2%	1.2%	2.4%	
	n	*76*	*2*	*0*	*1*	*1*	*2*	*82*

This table correlates to information in Graph 13.

Appendix table 4: Number and distribution of substance of main concern at ADOM treatment start collections, by ethnicity, October 2015 – September 2016

Ethnicity		Alcohol	Cannabis	Amphetamine-type stimulants	Opioids	Sedatives/ tranquilisers	Other drugs	Total
Māori	%	58.1%	16.5%	15.8%	3.2%	0.3%	6.2%	
	n	*1,197*	*340*	*325*	*66*	*6*	*128*	*2,062*
Pacific	%	75.7%	10.8%	10.8%	0.7%	0.7%	1.4%	
	n	*218*	*31*	*31*	*2*	*2*	*4*	*288*
Other	%	58.8%	11.9%	18.2%	6.7%	0.8%	3.6%	
	n	*2,061*	*416*	*638*	*236*	*29*	*126*	*3,506*

This table correlates to information in Graph 14.

Appendix table 5: Percentage and number of respondents to Q12 at ADOM treatment start collection, by main substance of concern, October 2015 – September 2016

Main substance of concern		Not at all	Less than weekly	Once or twice a week	Three or four times a week	Daily or almost daily	Total
Alcohol	%	52.1%	15.7%	10.6%	6.8%	14.8%	
	n	*1,805*	*546*	*366*	*236*	*514*	*3,467*
Cannabis	%	57.1%	14.4%	9.4%	4.6%	14.5%	
	n	*449*	*113*	*74*	*36*	*114*	*786*
Amphetamine-type stimulants	%	46.7%	14.6%	14.8%	8.5%	15.4%	
	n	*463*	*145*	*147*	*84*	*153*	*992*
Opioids	%	28.4%	11.9%	12.2%	11.6%	36.0%	
	n	*86*	*36*	*37*	*35*	*109*	*303*
Sedatives/tranquilisers	%	32.4%	18.9%	10.8%	0.0%	37.8%	
	n	*12*	*7*	*4*	*0*	*14*	*37*
Other drugs	%	50.2%	12.5%	12.8%	6.6%	17.9%	
	n	*129*	*32*	*33*	*17*	*46*	*257*

This table correlates to information in Graph 17.

Appendix table 6: Percentage and number of respondents to Q13 at ADOM treatment start collection, by main substance of concern, October 2015 – September 2016

Main substance of concern		Not at all	Less than weekly	Once or twice a week	Three or four times a week	Daily or almost daily	Total
Alcohol	%	43.9%	13.0%	14.4%	8.9%	19.7%	
	n	*1,522*	*452*	*500*	*309*	*682*	*3,465*
Cannabis	%	37.0%	16.3%	14.7%	10.0%	22.0%	
	n	*291*	*128*	*116*	*79*	*173*	*787*
Amphetamine-type stimulants	%	30.8%	13.7%	18.1%	13.4%	24.0%	
	n	*305*	*136*	*179*	*133*	*238*	*991*
Opioids	%	31.4%	13.5%	12.2%	14.9%	28.1%	
	n	*95*	*41*	*37*	*45*	*85*	*303*
Sedatives/tranquilisers	%	21.6%	18.9%	2.7%	10.8%	45.9%	
	n	*8*	*7*	*1*	*4*	*17*	*37*
Other drugs	%	44.2%	11.2%	16.3%	11.2%	17.1%	
	n	*114*	*29*	*42*	*29*	*44*	*258*

This table correlates to information in Graph 18.

Appendix table 7: Percentage and number of respondents to Q14 at ADOM treatment start collection, by main substance of concern, October 2015 – September 2016

Main substance of concern		Not at all	Less than weekly	Once or twice a week	Three or four times a week	Daily or almost daily	Total
Alcohol	%	52.1%	22.1%	15.4%	5.7%	4.6%	
	n	*1,758*	*746*	*520*	*194*	*156*	*3,374*
Cannabis	%	50.5%	21.0%	14.3%	7.7%	6.4%	
	n	*385*	*160*	*109*	*59*	*49*	*762*
Amphetamine-type stimulants	%	38.8%	18.2%	21.0%	9.2%	12.9%	
	n	*380*	*178*	*206*	*90*	*126*	*980*
Opioids	%	43.1%	17.1%	20.1%	7.7%	12.0%	
	n	*129*	*51*	*60*	*23*	*36*	*299*
Sedatives/tranquilisers	%	51.4%	16.2%	8.1%	10.8%	13.5%	
	n	*19*	*6*	*3*	*4*	*5*	*37*
Other drugs	%	50.6%	16.9%	12.9%	8.0%	11.6%	
	n	*126*	*42*	*32*	*20*	*29*	*249*

This table correlates to information in Graph 19.

Appendix table 8: Percentage and number of respondents to Q15 at ADOM treatment start collection, by main substance of concern, October 2015 – September 2016

Main substance of concern		Not at all	Less than weekly	Once or twice a week	Three or four times a week	Daily or almost daily	Total
Alcohol	%	59.7%	15.9%	10.5%	4.7%	9.1%	
	n	*2,070*	*552*	*364*	*163*	*316*	*3,465*
Cannabis	%	58.9%	16.5%	8.9%	3.7%	12.0%	
	n	*461*	*129*	*70*	*29*	*94*	*783*
Amphetamine-type stimulants	%	48.1%	13.1%	12.1%	8.3%	18.4%	
	n	*475*	*129*	*120*	*82*	*182*	*988*
Opioids	%	40.3%	10.9%	15.2%	9.6%	24.1%	
	n	*122*	*33*	*46*	*29*	*73*	*303*
Sedatives/tranquilisers	%	48.6%	10.8%	5.4%	8.1%	27.0%	
	n	*18*	*4*	*2*	*3*	*10*	*37*
Other drugs	%	62.4%	10.2%	9.0%	5.5%	12.9%	
	n	*159*	*26*	*23*	*14*	*33*	*255*

This table correlates to information in Graph 20.

Appendix table 9: Percentage and number of respondents to Q16 at ADOM treatment start collection, by main substance of concern, October 2015 – September 2016

Main substance of concern		Not at all	Less than weekly	Once or twice a week	Three or four times a week	Daily or almost daily	Total
Alcohol	%	27.6%	5.7%	7.6%	7.8%	51.4%	
	n	*938*	*194*	*257*	*265*	*1,749*	*3,403*
Cannabis	%	29.3%	7.1%	9.6%	8.6%	45.4%	
	n	*224*	*54*	*73*	*66*	*347*	*764*
Amphetamine-type stimulants	%	42.2%	8.9%	9.2%	8.2%	31.6%	
	n	*413*	*87*	*90*	*80*	*309*	*979*
Opioids	%	44.1%	7.7%	9.0%	8.0%	31.1%	
	n	*132*	*23*	*27*	*24*	*93*	*299*
Sedatives/tranquilisers	%	32.4%	5.4%	5.4%	16.2%	40.5%	
	n	*12*	*2*	*2*	*6*	*15*	*37*
Other drugs	%	34.7%	4.8%	10.4%	9.2%	41.0%	
	n	*87*	*12*	*26*	*23*	*103*	*251*

This table correlates to information in Graph 21.

Appendix table 10: Percentage and number of respondents to Q17 at ADOM treatment start collection, by main substance of concern, October 2015 – September 2016

Main substance of concern		Not at all	Less than weekly	Once or twice a week	Three or four times a week	Daily or almost daily	Total
Alcohol	%	85.8%	4.7%	1.9%	1.3%	6.3%	
	n	*2,968*	*161*	*67*	*44*	*218*	*3,458*
Cannabis	%	83.4%	6.5%	1.8%	1.2%	7.2%	
	n	*652*	*51*	*14*	*9*	*56*	*782*
Amphetamine-type stimulants	%	71.5%	7.5%	4.5%	3.0%	13.4%	
	n	*709*	*74*	*45*	*30*	*133*	*991*
Opioids	%	81.2%	4.6%	1.7%	1.7%	10.9%	
	n	*246*	*14*	*5*	*5*	*33*	*303*
Sedatives/tranquilisers	%	83.8%	0.0%	2.7%	5.4%	8.1%	
	n	*31*	*0*	*1*	*2*	*3*	*37*
Other drugs	%	81.6%	4.7%	2.7%	1.6%	9.4%	
	n	*208*	*12*	*7*	*4*	*24*	*255*

This table correlates to information in Graph 22.

Appendix table 11: Percentage and number of respondents to Q18 at ADOM treatment start collection, by main substance of concern, October 2015 – September 2016

Main substance of concern		Not at all	Less than weekly	Once or twice a week	Three or four times a week	Daily or almost daily	Total
Alcohol	%	79.3%	13.8%	4.4%	1.2%	1.3%	
	n	*2,728*	*475*	*151*	*43*	*45*	*3,442*
Cannabis	%	74.2%	10.7%	7.2%	2.8%	5.1%	
	n	*577*	*83*	*56*	*22*	*40*	*778*
Amphetamine-type stimulants	%	61.5%	12.4%	12.7%	4.8%	8.7%	
	n	*607*	*122*	*125*	*47*	*86*	*987*
Opioids	%	66.2%	8.9%	9.6%	4.0%	11.3%	
	n	*200*	*27*	*29*	*12*	*34*	*302*
Sedatives/tranquilisers	%	62.2%	16.2%	8.1%	2.7%	10.8%	
	n	*23*	*6*	*3*	*1*	*4*	*37*
Other drugs	%	74.7%	12.6%	4.0%	3.6%	5.1%	
	n	*189*	*32*	*10*	*9*	*13*	*253*

This table correlates to information in Graph 23.

Appendix table 12: Percentage and number of respondents of lifestyle and wellbeing responses at ADOM treatment start collections, by gender, October 2015 – September 2016

Question	Gender		Not at all	Less than weekly	Once or twice a week	Three or four times a week	Daily or almost daily	Total
Physical health (Q12)	Female	%	42.0%	15.7%	13.6%	8.9%	19.7%	
		n	*1,046*	*392*	*340*	*222*	*491*	*2,491*
	Male	%	56.9%	14.4%	9.6%	5.1%	13.9%	
		n	*2,578*	*654*	*434*	*232*	*630*	*4,528*
Mental health (Q13)	Female	%	28.7%	14.6%	16.6%	12.8%	27.4%	
		n	*713*	*363*	*412*	*318*	*681*	*2,487*
	Male	%	50.2%	13.0%	13.0%	7.8%	16.0%	
		n	*2,276*	*587*	*588*	*355*	*725*	*4,531*
Friend/ family arguments (Q14)	Female	%	44.6%	22.2%	17.6%	7.2%	8.4%	
		n	*1,094*	*544*	*431*	*177*	*205*	*2,451*
	Male	%	56.0%	19.2%	13.8%	5.7%	5.3%	
		n	*2,465*	*843*	*607*	*249*	*235*	*4,399*
Meaningful activity (Q15)	Female	%	53.6%	14.9%	11.0%	7.0%	13.5%	
		n	*1,330*	*370*	*274*	*173*	*335*	*2,482*
	Male	%	62.5%	14.1%	9.4%	4.2%	9.8%	
		n	*2,826*	*637*	*424*	*189*	*445*	*4,521*
Housing (Q17)	Female	%	80.0%	5.6%	2.3%	1.5%	10.6%	
		n	*1,986*	*140*	*57*	*37*	*262*	*2,482*
	Male	%	84.9%	5.0%	2.4%	1.4%	6.2%	
		n	*3,837*	*228*	*109*	*65*	*279*	*4,518*
Criminal activity (Q18)	Female	%	76.5%	12.1%	5.9%	2.2%	3.2%	
		n	*1,893*	*300*	*147*	*54*	*80*	*2,474*
	Male	%	76.1%	12.0%	5.9%	2.1%	3.9%	
		n	*3,406*	*538*	*262*	*94*	*173*	*4,473*

This table correlates to information in Graph 24.

Appendix table 13: Percentage and number of respondents of lifestyle and wellbeing responses Q16 at ADOM treatment start collections, by gender, October 2015 – September 2016

Question	Gender		Not at all	Less than weekly	Once or twice a week	Three or four times a week	Daily or almost daily	Total
work/study or caregiving engagement (Q16)	Female	%	30.4%	6.8%	8.4%	8.6%	45.8%	
		n	*746*	*167*	*206*	*211*	*1,125*	*2,455*
	Male	%	31.8%	6.2%	8.1%	8.1%	45.8%	
		n	*1,409*	*275*	*359*	*357*	*2,030*	*4,430*

This table correlates to information in Graph 25.