Matua Raki
National Addiction Workforce Development

Alcohol and other drug outcome measure (ADOM)

Report Six

Summary of ADOM collection data for period July 2015 to March 2019

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Focus on cannabis as main substance of concern

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Te Pou o te Whakaaro Nui

Part of the Wise Group

Contents

Glossary

AOD	Alcohol and Other Drug (services).
Matched pairs	Two collections, in this case treatment start and routine treatment end collections.
Episode of care	Where multiple referrals for a person are overlapping or within 14 days they have been condensed to one episode of care using the first referral and last discharge.
PRIMHD	Programme for the Integration of Mental Health Data. Ministry of Health.
Tangata whai ora, Tāngata whai ora	Term encompassing, client, service user, consumer, people that access services. (plural uses macron).

Acknowledgements:

This report was prepared by Paul Hanton, Clinical Project Lead & Sandra Baxendine, Information Analyst of Te Pou o te Whakaaro Nui. Thanks go to Klare Braye (Ministry of Health), Angela Jury PhD and Rhonda Robertson of Te Pou for their peer review and support.

Executive summary

This is the sixth national ADOM report and covers the time period from 1 July 2015 (when ADOM was first mandated) to March 2019[1][2]. Data used in this report is from PRIMHD. It was extracted on 9 April 2019. The focus is on cannabis as the stated main substance of concern and the analysis of outcomes for tāngata whai ora following treatment. An overview of the method is included in Appendix A. The rationale for this report's focus is to inform the sector regarding cannabis presentation to treatment, prior to the referendum on the legalisation of cannabis in 2020.

Key objectives included describing for people with cannabis as the stated main substance of concern:

- ADOM collections in PRIMHD between 1 July 2015 and 31 March 2019
- lifestyle and wellbeing issues at treatment start, including any gender and ethnicity differences
- outcomes following treatment, including cannabis use, lifestyle and wellbeing issues, and recovery.

Key findings

There were 366 matched pairs (where treatment start, and treatment end data was collected for the same person) where cannabis was the stated main substance of concern that were analysed in this report. About one-third of this group also reported alcohol as a secondary substance of concern. Analyses show a large reduction in days of cannabis use between treatment start and treatment end (Table 1) where cannabis was the stated as main substance of concern. Treatment was also associated with positive changes in lifestyle and wellbeing, except engagement with work, study or caregiving. Positive changes in recovery following treatment were also found.

Table 1: Change in Days of Cannabis Use Between Treatment Start and Treatment End.

ADOM Question	Start mean	End mean	Outcome (Start minus end mean)	Cohen's d (effect size with 95% CI)	Effect of treatment
Q3: Cannabis[3] (days of use 0-28)	12.4 *(n=1,153)*	5.3 *(n=1,147)*	7.2	0.75 (0.66-0.83)	Medium
Cannabis use where main stated substance of concern is cannabis	17.5 (*n*=286)	6.6 (*n*=285)	10.9	1.13 (0.95-1.31)	Large
Cannabis outside main substance of concern	10.8 (*n*=867)	4.8 (*n*=862)	5.9	0.64 (0.54-0.74)	Medium

Note: Cohen (1992)[4] reports the following intervals for d: .2 to .5: small effect; .5 to .8: medium effect; .8 and higher: large effect.

[1] Data for last three months is open to amendment as DHBs/NGOs have a three month window to submit accurate data. Data is subject to availability, some DHBs and NGOs are yet to submit ADOM data.

[2] This time period enables a larger data sample.

[3] Any cannabis use at all

[4] Cohen, J. (1992). A power primer: Quantitative methods in psychology, *Psychologic Bulletin, 112*(1), 155-159.

Part 1: ADOM in PRIMHD

This section describes ADOM collection in PRIMHD by mandated services between 1 July 2015 and 31 March 2019.

- 92,009 - The total number of episodes of care opened; both in DHBs and non-government organisations (NGOs)[5].
- 29,007- The total number of valid ADOM **treatment start collections**.
- 3,132 – The total number of valid ADOM treatment start collections with cannabis stated as the main substance of concern.
- 4,039- The total number of matched pairs - those ADOM collections that have *both* a treatment start *and* treatment end collection within the period.
- 366 – The total number of matched pairs where cannabis was the stated main substance of concern.

When interpreting findings in this report it is important to bear in mind the figures above. **This data cannot be used to understand cannabis issues in the general population[6].**

Figure 1 shows the total number and percentage of episodes of care into ADOM mandated AOD services by NGOs and DHBs. There were more treatment start collections within NGOs than DHBs.

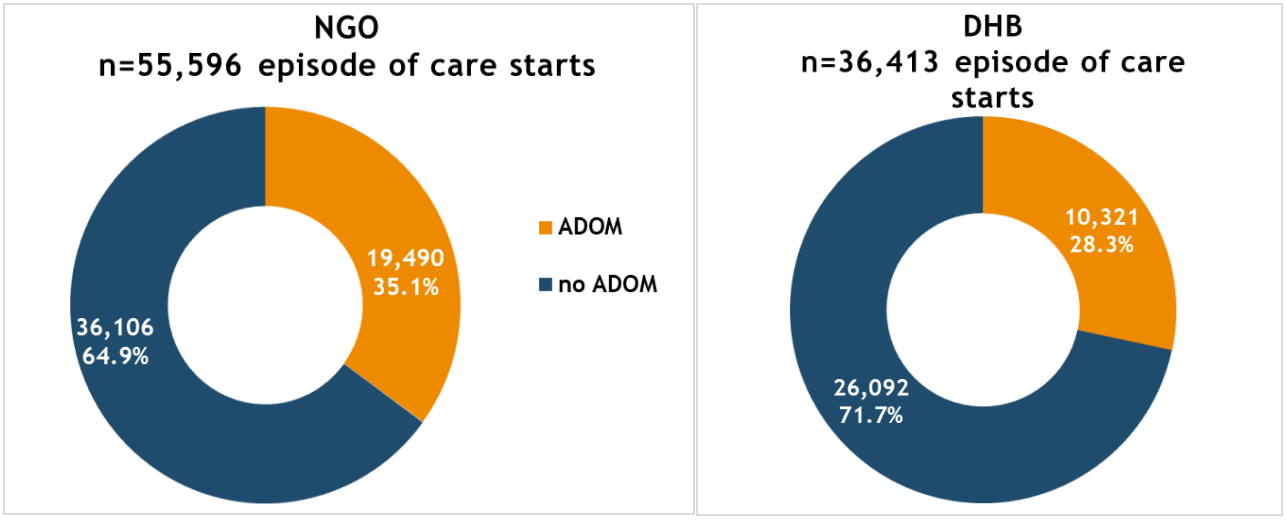

Figure 1: AOD episode of care with at least one ADOM Collection (treatment start or assessment only) by organisation type (NGO and DHB), July 2015 to December 2018 (all substances).

The percentage of at least one ADOM collection (treatment start or assessment only) against episodes of care in DHBs and NGOs is shown in Figure 2. NGOs have a higher ratio of ADOM collections (treatment start or assessment only) against episode of care starts than DHBs.

[5] July 2015 – Dec 2018

[6] For treatment starts Cannabis was main substance of concern for 13.1% of the stated substance of concern or 10.7% of total. For matched pairs treatment start cannabis main substance of concern was 11.1% of specified or 9.1% of total.

ADOM collections by reason for collection, cannabis as main substance of concern

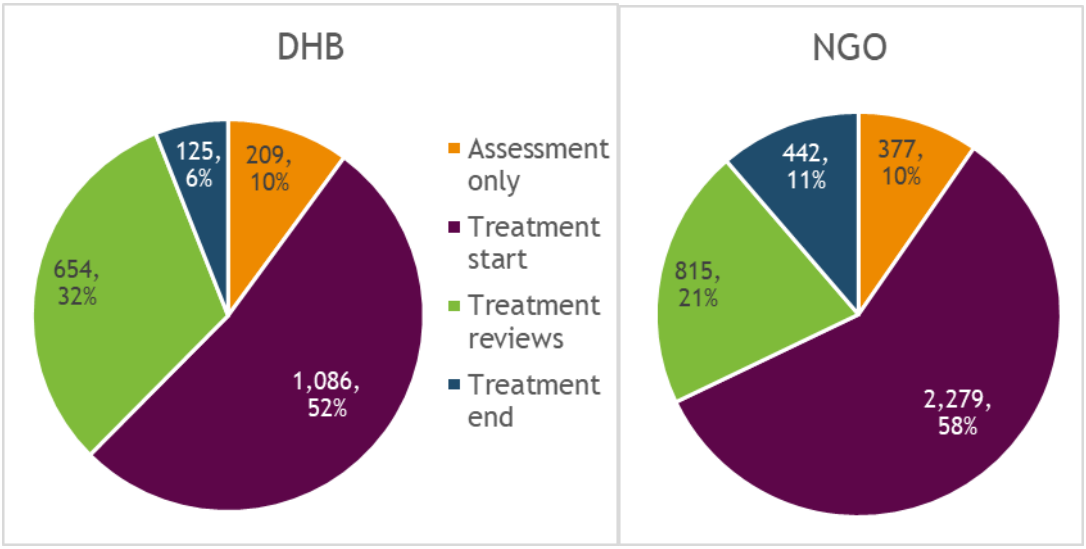

Figure 2: Number valid ADOM collection by reason for collection and organisation type, Cannabis main substance of concern.

Figure 2 shows the **total** ADOM collections for cannabis as the main substance of concern by all 'reason for collection' (RFC): assessment, start, review or treatment end. NGO services show more treatment starts and treatment end collections than DHBs; a higher proportion of reviews were undertaken in DHB services. The next part of this report focuses on the treatment start information.

Part 2: ADOM treatment starts where cannabis is the stated main substance of concern

This section describes ADOM treatment start information for cannabis as the main substance of concern. This provides an overview of the demographics, substance use, and health and wellbeing of tāngata whai ora attending community, AOD services at a national level. Analyses are based on valid ADOM collections which are described in the Appendix.

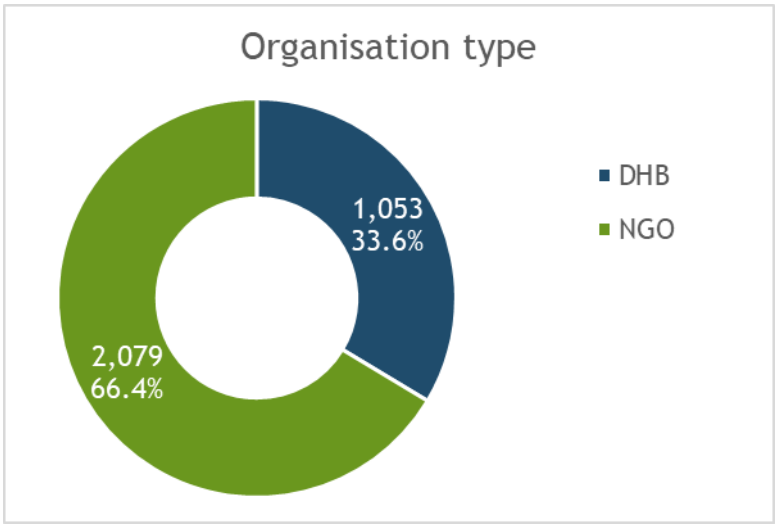

Figure 3: Valid ADOM treatment start collection by organisation type, Cannabis main substance of concern.

Figure 3 shows valid ADOM treatment start collections for cannabis as a main substance of concern by DHB and NGO, with percentages. NGOs have more valid treatment start ADOMs recorded than DHBs.

Table 2: *Profile of ADOM Treatment Start Collections by Gender, Ethnicity and Age Group, Cannabis Main Substance of Concern and Other Treatment Starts*

	Cannabis Main Substance of Concern		Treatment starts (cannabis not stated main substance of concern)	
	Number	Percentage	Number	Percentage
Gender				
Female	994	31.7%	8,757	33.8%
Male	2,138	68.3%	17,118	66.2%
Total	**3,132**	**100.0%**	**25,875**	**100.0%**
Ethnicity				
Māori	1,356	43.3%	9,191	35.5%
Pasifika	175	5.6%	1,937	7.5%
Other	1,601	51.1%	14,747	57.0%
Total	**3,132**	**100.0%**	**25,875**	**100.0%**
Age group				
18-24 years	1,110	35.4%	3,828	14.8%
25-44 years	1,624	51.9%	15,186	58.7%
45-64 years	392	12.5%	6,352	24.5%
65 years and over	6	0.2%	509	2.0%
Total	**3,132**	**100.0%**	**25,875**	**100.0%**

Table 2 shows the demographic profiles of treatment start ADOM collections where cannabis is the main substance of concern compared to other treatment starts. The gender distribution is in line with the profile of people accessing AOD services. Māori people make up 43.3 per cent of people who state cannabis is their main substance of concern, and are over represented compared to Māori people in the general population of 15 per cent[7][8]. Over half of people with cannabis as their main substance of concern were aged 25-44 years compared to 34% of people in the general population based on 2013 Census data.

Whilst this report primarily focuses on cannabis as the main substance of concern, given people often use multiple substances, secondary use of substances was also examined. About one-third of people with cannabis as their main substance of concern reported alcohol being a second substance of concern, and 13% Amphetamine-type stimulants.

Table 3: *Second substance of concern for Cannabis as main substance of concern*

Substance of main concern	number	Second substance of concern	number
Cannabis	3,132	Alcohol	1,059
		Amphetamine-type stimulants	404
		Other drug, unspecified[1]	243

(1) Includes Cigarettes/Tobacco as new code where organisation are using it.

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

[8] Māori people make up 31.7% of hazardous drinkers https://minhealthnz.shinyapps.io/nz-health-survey-2017-18-annual-data-explorer/_w_23067b45/#!/explore-topics

ADOM treatment start collections by lifestyle and wellbeing

This section focuses on the lifestyle and wellbeing of people accessing AOD services, who reported cannabis as their main substance of concern (other substance use presentation contained in reports 1-6). Questions on lifestyle and wellbeing are contained in section 2 of the ADOM.

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?

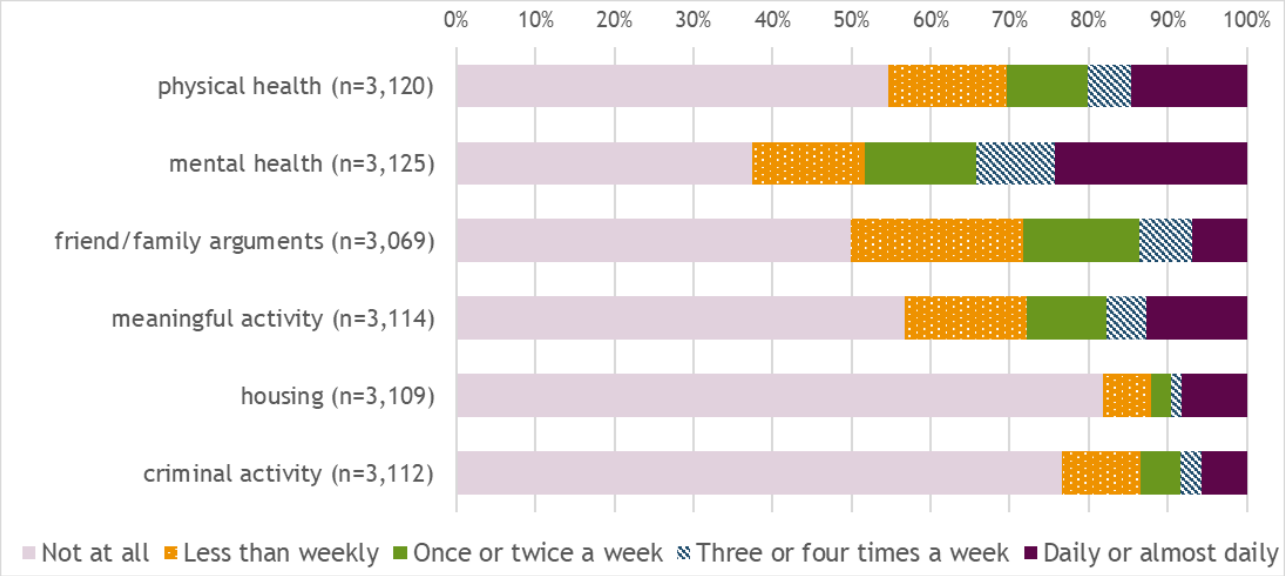

Figure 4: *Distribution of lifestyle and wellbeing responses at ADOM treatment start collections, Cannabis main substance of concern.*

Figure 4 shows overall response distribution of lifestyle and wellbeing ratings. Results indicate people who report cannabis as their main substance of concern are most likely to have mental health problems, followed by problems with family and friends, their physical health and engagement in meaningful activities. Over 10 per cent of tāngata whai ora stated they were engaged in criminal activity at least weekly.

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?

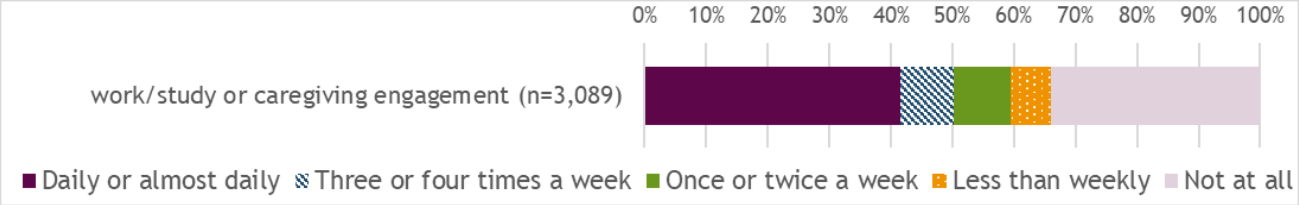

Figure 5: *Distribution of lifestyle and wellbeing Q16 responses at ADOM treatment start collections, Cannabis main substance of concern.*

Figure 5 shows engagement with work and other activities and indicates 34% of tāngata whai ora were not engaged in work, study or caregiving activities.

Lifestyle and wellbeing – by gender and ethnicity

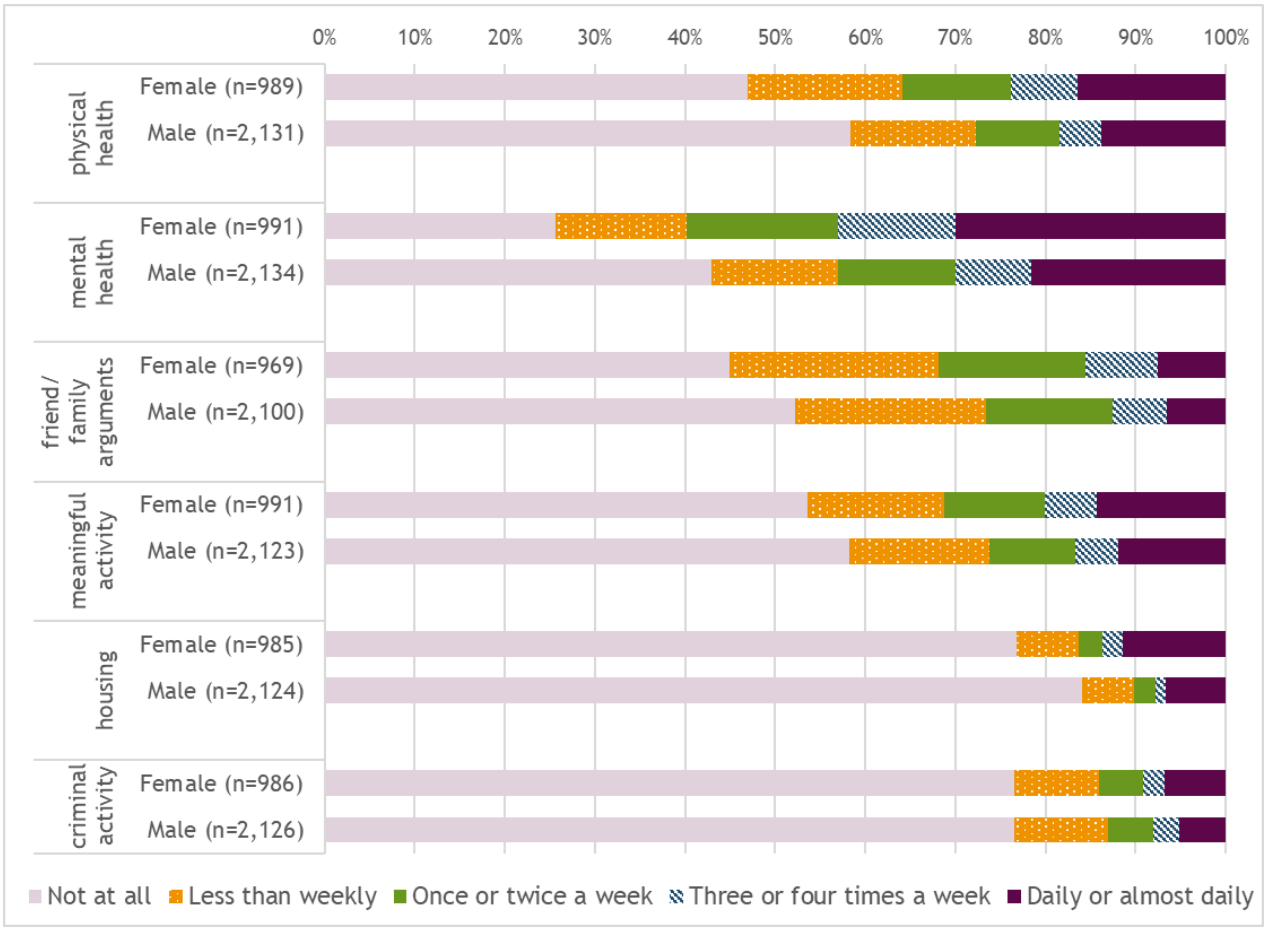

Figure 6: Distribution of lifestyle and wellbeing responses at ADOM treatment start collections, by gender, Cannabis main substance of concern.

Figure 6 shows females were more likely to report lifestyle and wellbeing concerns, particularly in relation to housing, mental and physical health. Criminal activity was similar for males and females.

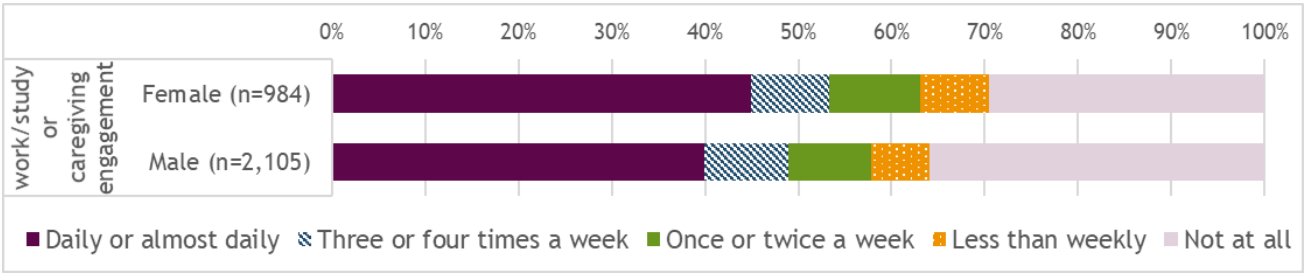

Figure 7: *Distribution of lifestyle and wellbeing responses Q16 (engagement with work, study or care giving) at ADOM treatment start collections, by gender, Cannabis main substance of concern.*

Figure 7 shows slightly more females were engaged with work, study or caregiving activities than males.

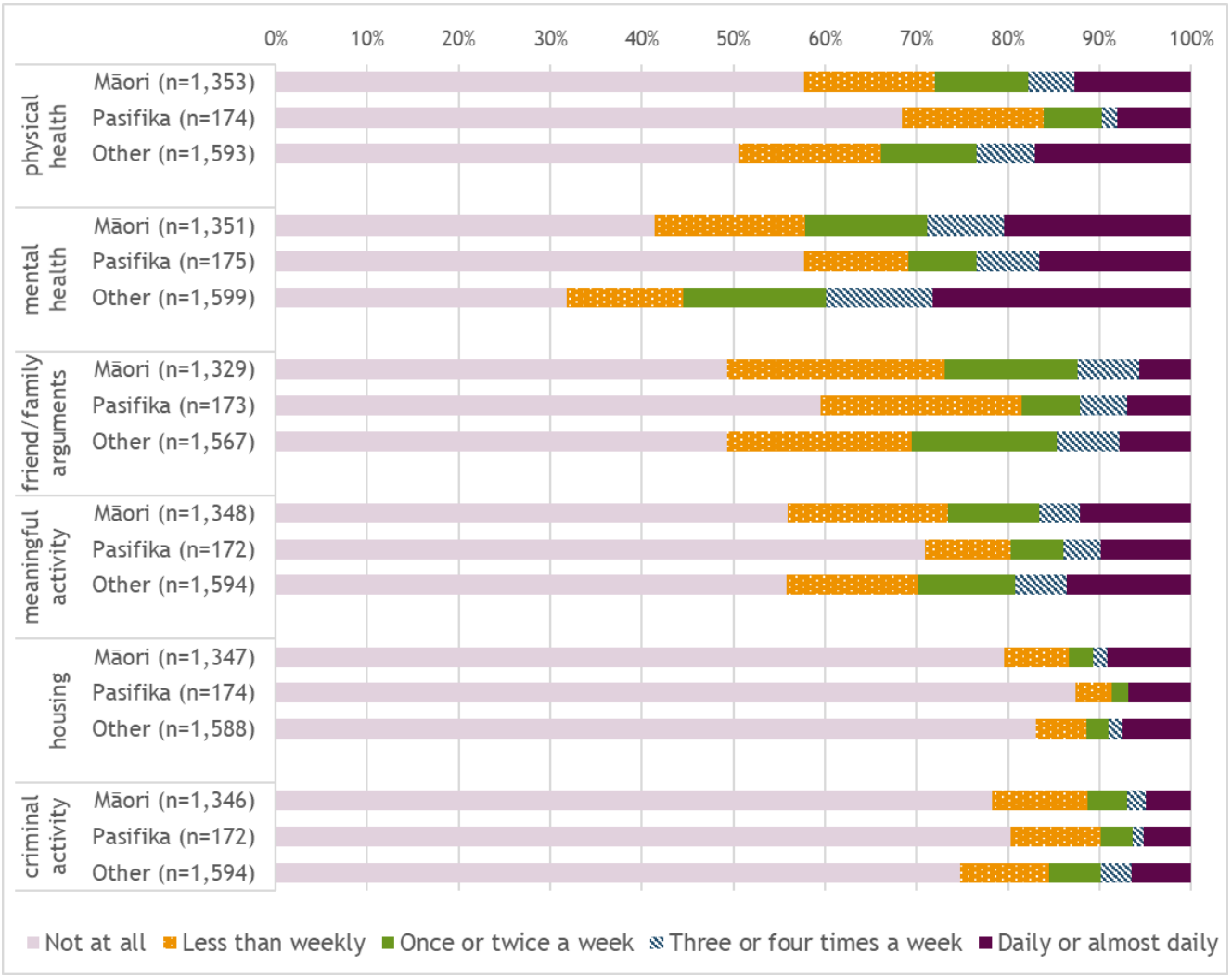

Figure 8: Distribution of lifestyle and wellbeing responses at ADOM treatment start collections, by ethnicity, Cannabis main substance of concern.

Figure 8 shows the lifestyle and wellbeing of tāngata whai ora by ethnic group. While the extent of ratings differed and may reflect different cultural perceptions, results indicate that across all ethnic groups the biggest lifestyle and wellbeing issues related to mental health, physical health and problems with family and friends.

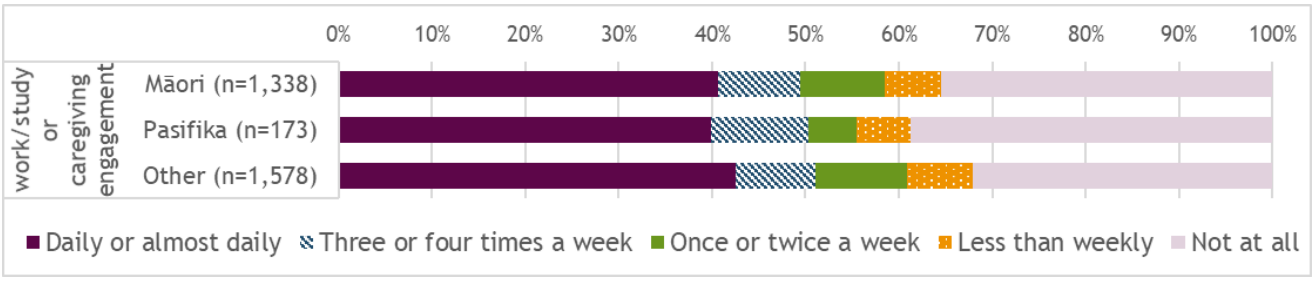

Figure 9: Distribution of lifestyle and wellbeing responses Q16 (engagement with work, study or caregiving) at ADOM treatment start collections, by ethnicity, Cannabis main substance of concern.

Figure 9 indicates that Pasifika people were slightly less engaged with work, study or caregiving than tāngata whai ora in other ethnic groups.

Part 3: Outcomes (matched pairs) for those stating cannabis as their main substance of concern

This section examines outcomes for the 366 people following treatment who reported cannabis as their main substance of concern at treatment start, and had both treatment start and treatment end ADOM collections (matched pairs).[9]

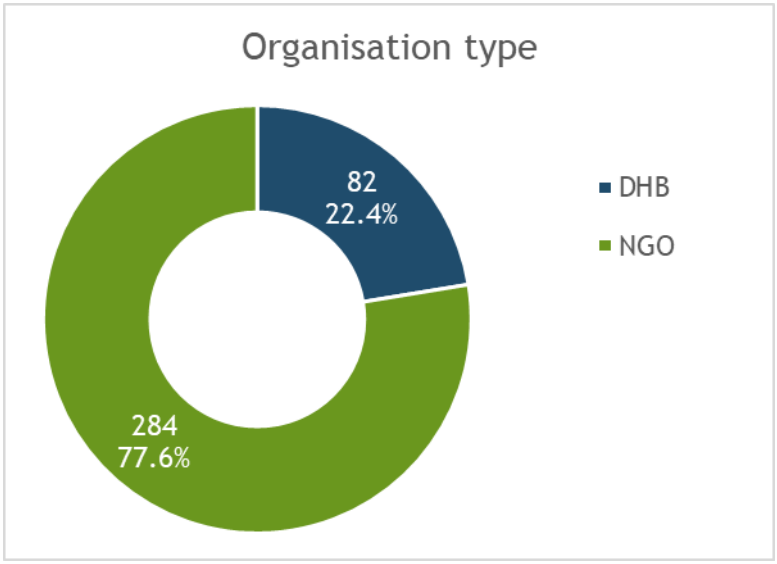

Figure 10: *Percentage of ADOM matched pairs by organisation type, Cannabis main substance of concern*

Figure 10 shows that NGOs collect a much larger number of matched pairs than DHBs. DHBs may keep people in treatment longer (less treatment end completions) than NGOs, perhaps due to case complexity[10]. There may be other reasons for the disparity, such as NGO's being better at completing ADOM treatment end, better engagement with tāngata whai ora, less drop out/DNA (Did Not Attend).

[9] People who are still in treatment will not be included in matched pairs analyses; Also, did not attend (DNA) drop offs exclude a significant number of potential matched pairs (see Appendix A for inclusion rules).

[10] DHBs are often contracted to work with people with moderate to severe AOD needs, where as NGOs are often funded to work with people with mild to moderate AOD needs.

Treatment start and end, cannabis

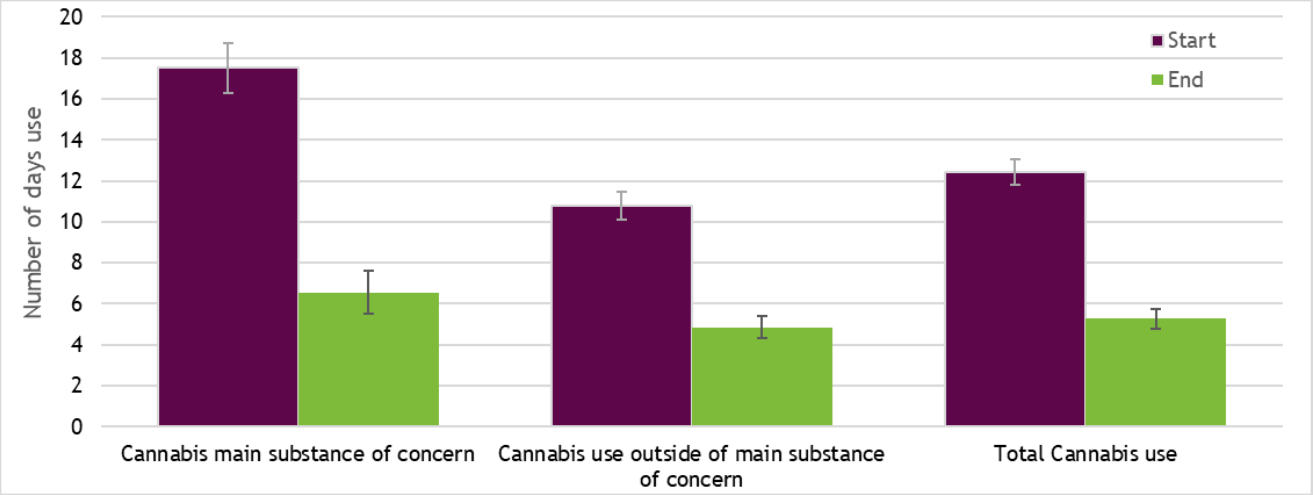

Figure 11: Days of substance use in the past four weeks at ADOM treatment start and treatment end for those matched pairs with substance use as treatment start.

Figure 11 shows days of cannabis use decreased between treatment start and treatment end. Overall, the average number of days of cannabis use for all users was 12.4 days at treatment start compared to 5.3 days at treatment end. This indicates a moderate reduction in days of cannabis use by 7.2 days. For people reporting cannabis as their main substance of concern there was a large decrease 17.5 to 6.6 days which is a 10.9 days reduction.

Table 4: Change in Days of Cannabis Use Between Treatment Start and Treatment End.

ADOM Question	Start mean	End mean	Outcome (Start minus end mean)	Cohen's d (effect size with 95% CI)	Effect of treatment
Q3: Cannabis[11] (days of use 0-28)	12.4 *(n=1,153)*	5.3 *(n=1,147)*	7.2	0.75 (0.66-0.83)	Medium
Cannabis use where main stated substance of concern is cannabis	17.5 (*n*=286)	6.6 (*n*=285)	10.9	1.13 (0.95-1.31)	Large
Cannabis outside main substance of concern	10.8 (*n*=867)	4.8 (*n*=862)	5.9	0.64 (0.54-0.74)	Medium

Note: Cohen (1992)[12] reports the following intervals for d: .2 to .5: small effect; .5 to .8: medium effect; .8 and higher: large effect.

[11] Any cannabis use at all

[12] Cohen, J. (1992). A power primer: Quantitative methods in psychology, *Psychologic Bulletin, 112*(1), 155-159.

ADOM matched pairs by lifestyle and wellbeing

This section explores changes in lifestyle and wellbeing between treatment start and treatment end where cannabis was the main substance of concern.

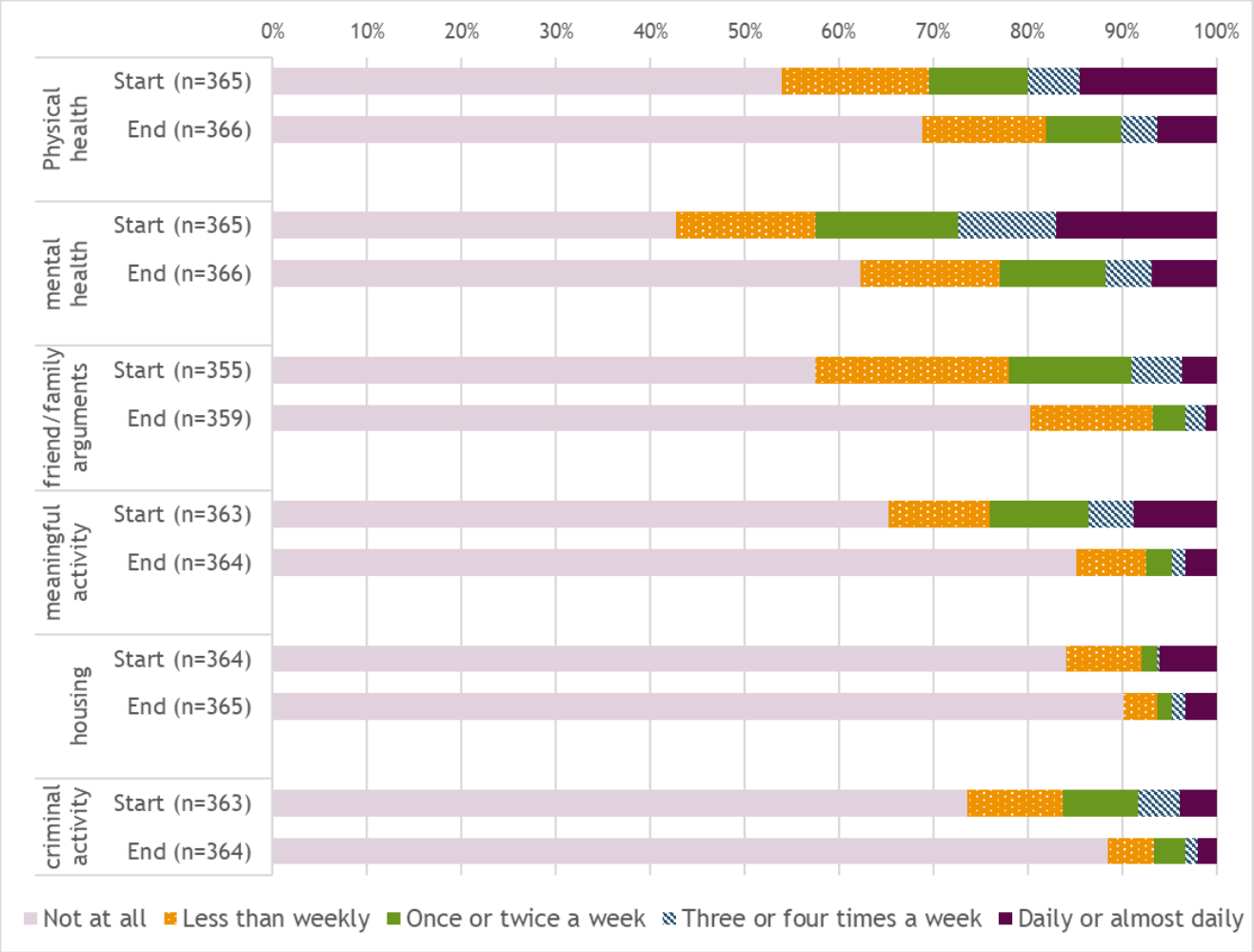

Figure 12: Distribution in lifestyle and wellbeing for ADOM treatment start and end for matched pairs, cannabis main substance of concern.[13]

Figure 12 shows positive changes in all lifestyle and wellbeing issues examined between treatment start and treatment end.

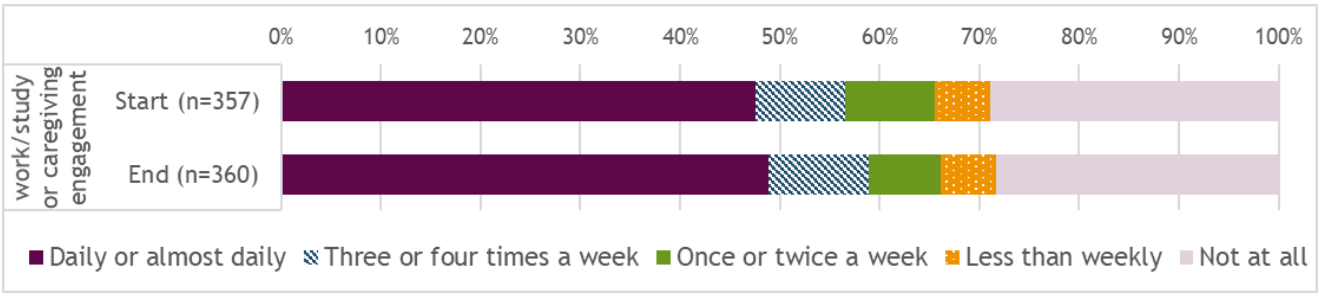

Figure 13: Distribution in lifestyle and wellbeing between ADOM treatment start and end for Q16 matched pairs, cannabis main substance of concern.

[13] The matched pair total is 366. 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.

Figure 13 indicates there were no real changes in engagement in employment, study and caregiving between treatment start and treatment end.

ADOM matched pairs by recovery

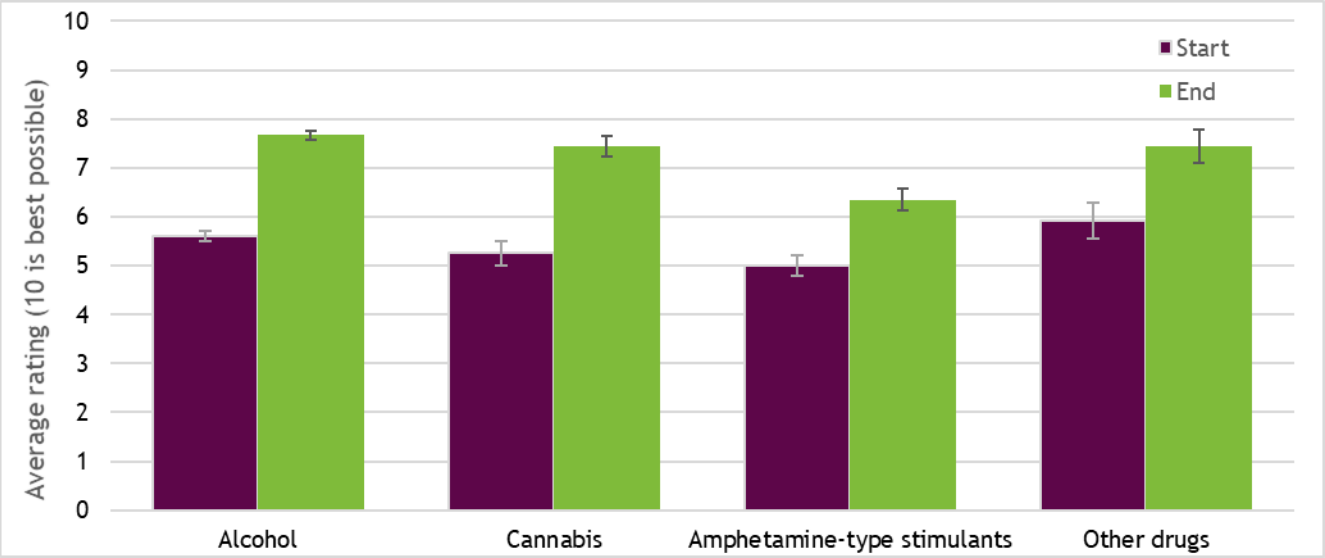

Figure 14: *Average self-rating of rates of closeness to desired recovery at ADOM treatment start and end collection, by main substance of concern.*

Figure 14 shows positive changes during treatment in where tāngata whai ora want to be in their recovery.

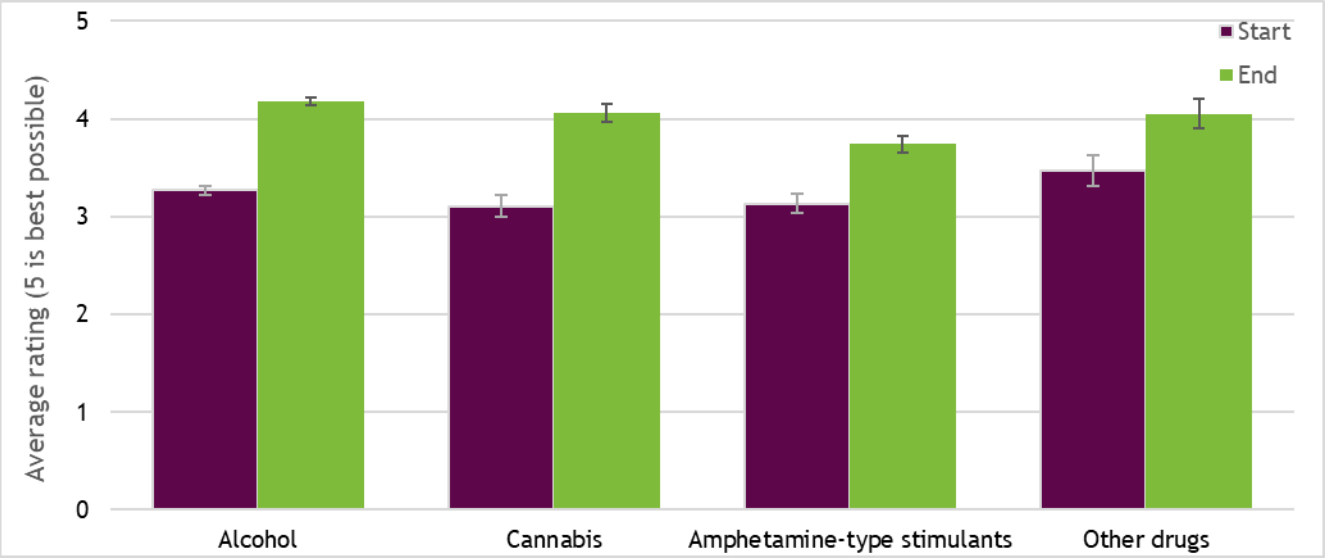

Figure 15: Average self-rating of how satisfied tāngata whai ora are with progress towards achieving their recovery goals at ADOM treatment start and end collection, by main substance of concern.

Figure 15 shows positive changes during treatment in the progress of tāngata whai ora towards their recovery goals.

In conclusion

This report examined cannabis use, lifestyle and wellbeing, and recovery for people accessing community, alcohol and other drug services who reported cannabis as their main substance of concern. In total, 3,132 out of 29,007 people accessing community AOD services reported cannabis as their main substance of concern.

A total of 366 people that reported cannabis as their main substance of concern had matching treatment start and treatment end collections. About one-third of this group reported alcohol as a secondary substance of concern.

Moderate-to-large reductions in cannabis use were found for people accessing community, AOD services following treatment. People with cannabis as their main substance of concern reported the largest reductions in days of use.

At treatment start, people with cannabis as a main substance of concern were most likely to report problems with their mental health and family/friends. Results were similar for males and females, and across different ethnic groups. Treatment was associated with positive changes in lifestyle and wellbeing issues examined, except for engagement in work, study and caregiving activities for which there was no real change. This highlights the need for greater support in this area.

The routine use of ADOM needs to increase that these findings are reported in future on larger data sets, and therefore have increased validity and utility.

Appendix A. Method[14]

Inclusion and exclusion criteria

AOD episode of care entering mandated services:

- includes teams mandated to collect ADOM[15]
- 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
- join referral together to make an episode of care if they overlap or have 14 days or less between referral end and referral start.
- includes those episodes of care which start in the period of the report
- excludes Waitematā DHB before 31 March 2018 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 are within the episode of care: Include only episode of care 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[16]
- excludes RC19 – Treatment end – DNA and RC21 – Treatment end – other
- excludes Waitematā DHB collections before 31 March 2018 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.

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.

[14] Please see ADOM report building rules for a full explanation of methodology, inclusion and exclusion of data in these reports: https://www.tepou.co.nz/resources/adom-report-building-rules/775

[15] 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.

[16] This is excluding questions 7, 9 and 11.