Using technology to digitally disrupt the delivery of outcome measures in Australian Alcohol and Other Drug (AOD) services

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NCYSUR
National Centre for Youth Substance Use Research

ALL the people with lived experience who participate in our research

Overall cost of alcohol
1306 Int$/adult
1852 Int$/drinker or
2.6% of GDP

#1 Risk Factor
for Death & Disability
across all age groups

To reduce the burden and cost of AOD use, delivery of cost-effective, evidence-based treatment is critical.

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138,726

clients received treatment in 2020-21 (up 19% 2014-15)

68% of services are NGOs
Deliver 73% of all treatment

45% in AOD services over the past 10 years

Treatment needs of **44 – 73%** of people with current SUDs are not being met.   (Ritter et al., 2019)

- Most common drugs: alcohol, amphetamines, cannabis

- Counselling (38%) most common

- Clients attend 1.7 treatment episodes

- Demand for treatment greatly outweighs the resources available
   - Volume of AOD service delivery (# of clients) being prioritized over quality

- People who seek help rarely receive evidence-based treatment
   - Only 25% of AOD services have the capacity to deliver them
   - 10-25 year delay between evidence & its translation into practice

- Huge gaps in the evidence-base

Values-based Healthcare (VBHC)

- Shifts the focus away from the volume (number of clients seen) of service delivery towards client outcomes (values)

- Routine Outcome Measures (OMs) are the cornerstone of VBHC

Aims to:
i. Identify what outcomes matter to clients
ii. Implement a core set of OMs to assess, monitor and provide feedback (individual and service level) on treatment progress
iii. Use OM data to improve the efficiency, outcomes and cost-effectiveness of treatment

Shown to optimize service delivery in cancer, cardiovascular disease and mental health services

Resulting OM data can be used to fill gaps in the evidence base:
i. Identify which service types/settings or treatments provide the best outcomes for different types of AOD presentations
ii. Monitor clinically significant indicators of change over time, to identity clients whose recovery is 'off track' so treatment can be adapted accordingly.

Aim

To describe how technology can be used to increase the uptake and completion of COMs in AOD services

Objective

Develop a values based model of health care to increase the efficiency, outcomes and cost effectiveness of AOD treatment

Core Outcome Measures (COMs)

Lives Lived Well

AOD

ATOP: AOD use in past month + QOL

ASSIST: AOD use and related problems in the past 3 months

Other

PGSI: Gambling

Client satisfaction @ 1 month

Mental Health

PHQ-9: Depression symptoms in past 2 weeks (inc. suicidal ideation)

GAD-7: Generalised anxiety in the past 2 weeks
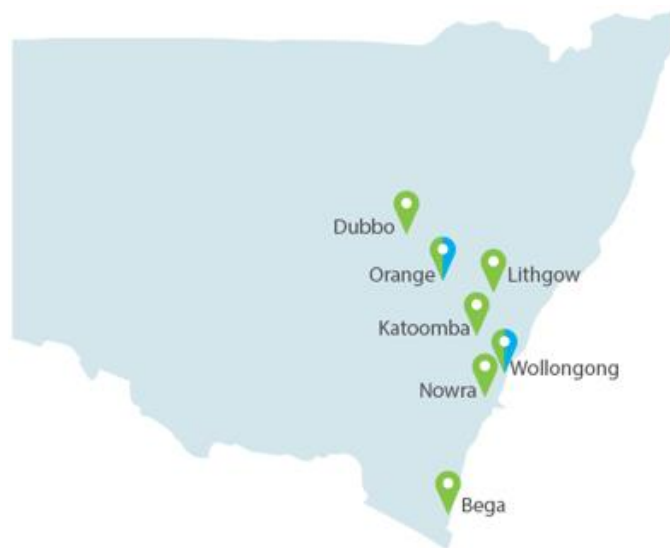
*PTSD-5: PTSD screen

*Psychosis Screener: Past 12 months

Lives Lived Well

- 167 programs, delivered by 426 staff across 49 locations in QLD & NSW
- Treat approximately 14,000 (270/week) clients/year

Mareeba · Cairns
Townsville
Bowen
Ayr
Charters Towers · Airlie Beach
Collinsville
Mackay
Longreach
Emerald
Rockhampton
Gladstone
Kingaroy · Sunshine Coast
Roma · Caboolture
Chinchilla · Dalby · Brisbane
Toowoomba · Gatton · Upper Coomera
Goondiwindi · Logan · Gold Coast
Warwick

Dubbo
Orange · Lithgow
Katoomba
Nowra · Wollongong
Bega

- Alcohol and Drug Counselling (individual & group programs)
- Outreach Services
- 6 Residential Services

LIVE-IN & RECOVER

Counsellors

- Clients won't complete OM's/can't complete OMs by themselves (literacy issues)
- Using OMs at service entry will make clients disengage from help-seeking/treatment
- Clients want to tell their story
- Clients don't have emails/mobile phones
- No time to deliver OMs to clients or provide feedback
- ? commitment to delivering EBP/implementing OMs

Organisational

- Paper & pencil OMs; no scoring/feedback resources
- Voluntary; lack of consensus core measures
- BL only, no follow up
- No support system/policies/procedures/training/KPIs for OMs

System:

- Funding models focus on:
  - number of clients enrolled, not treatment
  - quantity not quality or outcomes

Develop and implement COM system

1. Collect COM self-report data directly from clients and provides feedback (Qualtrics)

2. LLW Client Relationship Management (CRM) System
- sends outcome measures to clients at BL, 1 and 3 months

OM Implementation Phases

Preparation	2017-2019	OM review, needs analysis
		COMs used in/outpatient trials
		Internal system dev
	Apr 2020-Oct 2020	New CRM
		CRM training rollout
		BL OM sent to client at enrolment
		Qualtrics feedback
		Counsellor scheduled 1 & 3M OMs

Phase 1	Nov 2020-	BL OM sent at enrolment
		OMs sent via email/SMS
		Qualtrics feedback
		? Need assistance
		3 x reminders
		Auto-scheduled 1 & 3M @ BL Comp
		CRM & OM training @ service orientation

% of BL, 1 & 3 Month OM Sent & Completed across Outpatient Services
(n = 11,360 Enquires; n = 5,624 Enrolments)

Legend: Enq/Enrolled | BL OM Comp/Sent | BL OM Comp/Enrol | 1M Comp/Sent | 3M Comp/Sent

End values: 66%, 73%, 49%, 42%, 23%
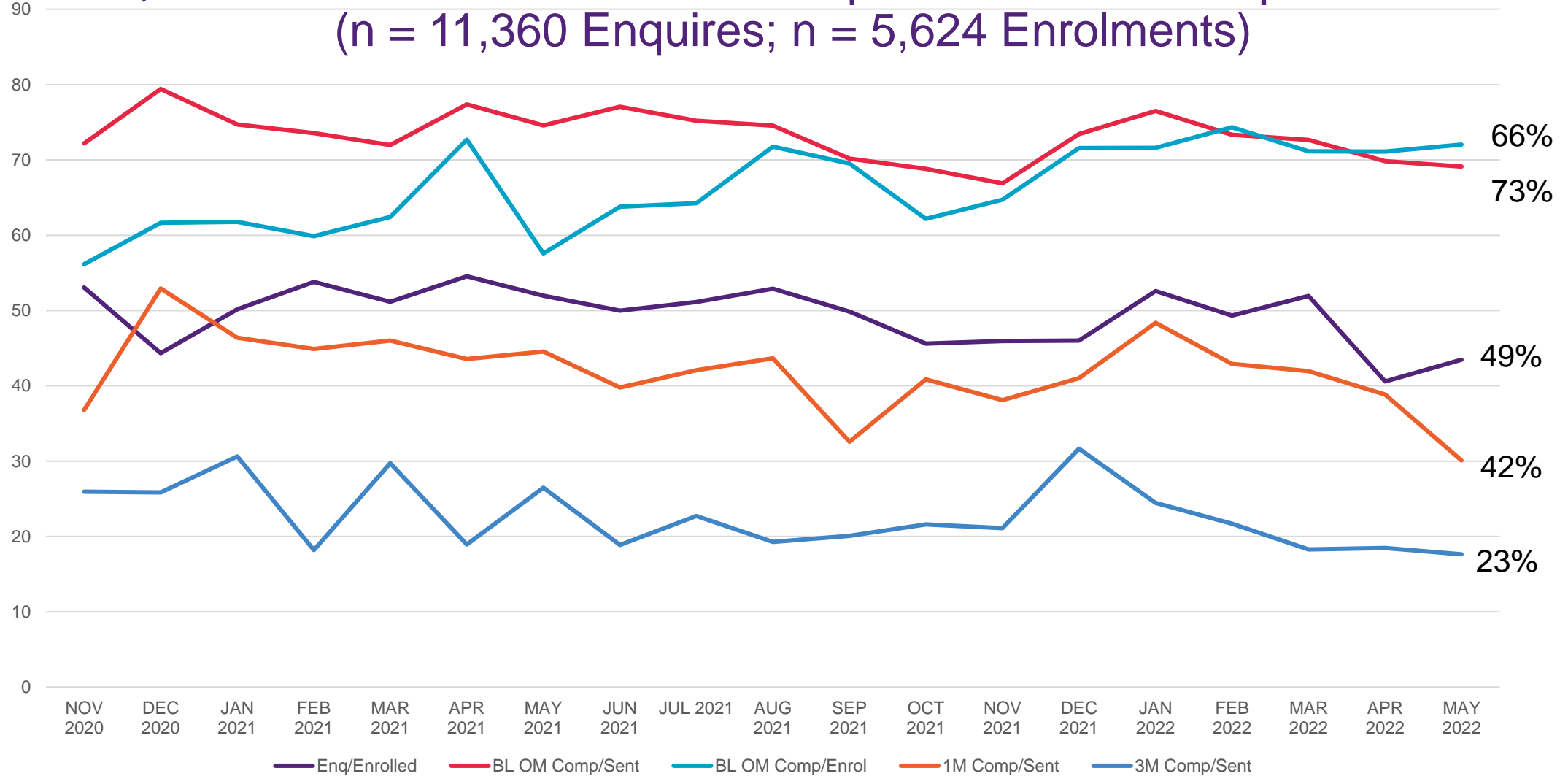
EXCLUDES: Research, DAAR

CRICOS code 00025B

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OM Implementation Phases

Phase 3

Nov 2021-

New website scores OMs, generates immediate feedback for clinicians and clients at BL, 1 & 3 months

Progress charts at 1 & 3 months

First step brief intervention project

- 4 outpatient services

- Training and supervision in 3 modules:

      Module 1 OM Feedback and Information

- BL OM sent at enquiry – completed prior to enrolment

? Need assistance, get immediate help.

3 x reminders

Auto-scheduled 1 & 3M @ BL Comp
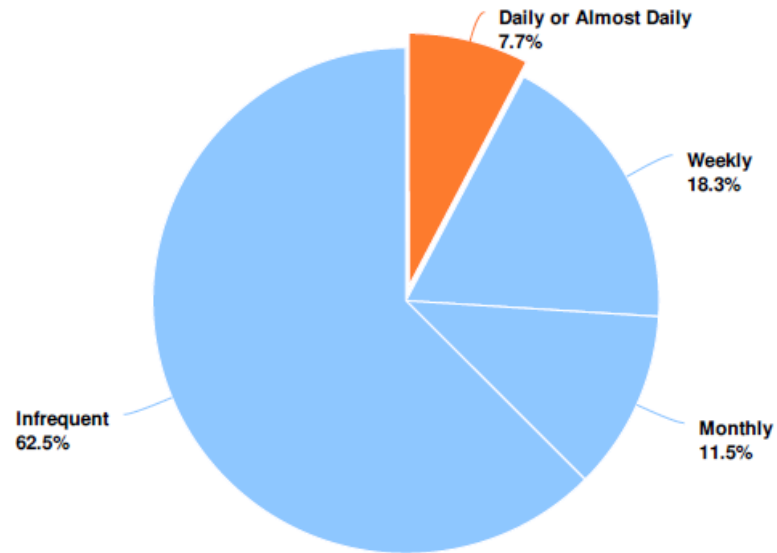
CRM & OM training @ service orientation

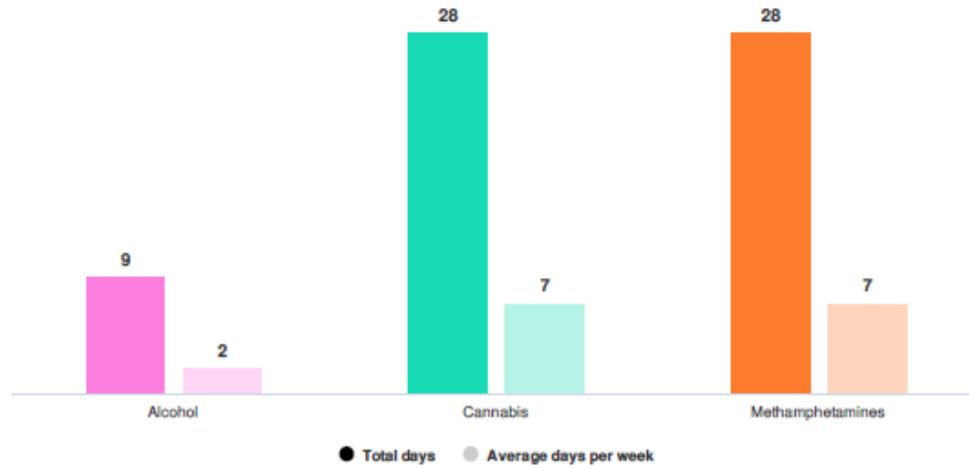## My Substance Use:

Substances used in the past 3 months

Alcohol Weekly	**Cannabis** Daily or Almost Daily
Cocaine Once or Twice	
Methamphetamines Daily or Almost Daily	**Tobacco** Daily or Almost Daily

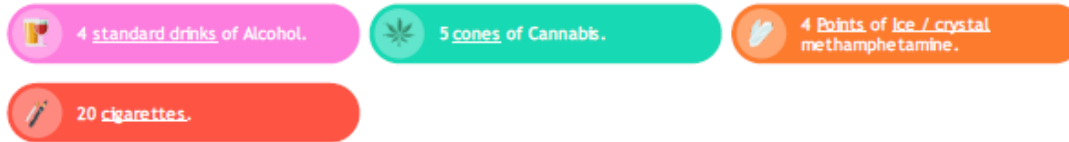You reported that **Methamphetamines** has the most impact on your life.

14.2% of **males** your age have ever used **Methamphetamines** and **3.6%** have used it in the past year. Of those that have used in the past year **7.7%** of **males** have used as frequently as you (Daily or Almost Daily).
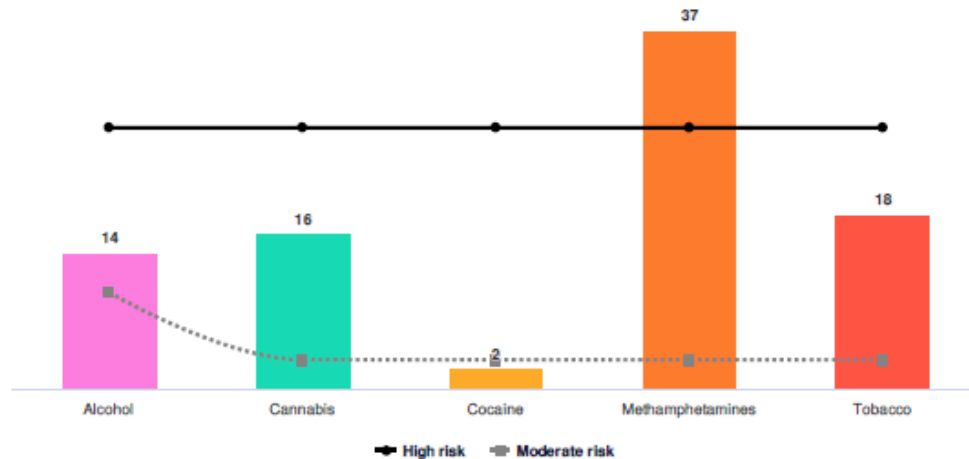

Daily or Almost Daily 7.7%

Weekly 18.3%

Monthly 11.5%

Infrequent 62.5%

Days used in the Past 4 weeks (28 days)

- Total days Average days per week

Amount typically used

- 4 standard drinks of Alcohol.
- 5 cones of Cannabis.
- 4 Points of Ice / crystal methamphetamine.
- 20 cigarettes.

WHO ASSIST Total Scores

- High risk Moderate risk

Not in client feedback

CRICOS code 00025B

Problems identified for **Methamphetamines** in the past **3 months**

Had a strong desire or urge to use	Daily or Almost Daily
Methamphetamines has lead to health, social, legal or financial problems	Weekly
Failed to do what was normally expected of you because of your **Methamphetamines** use	Weekly
Friends or relatives have expressed concern about your **Methamphetamines** use	Yes, in the past 3 months
Ever tried and failed to control, cut down or stop your **Methamphetamines** use	Yes, in the past 3 months

Risky behaviours

Injected substance?	Yes, in the past 3 months

Past month **risky activities** after using alcohol and other drugs

- Driving under the influence
- Engaging in unprotected sex
- Sharing needles
- Engaging in self-harming behaviours
- Experiencing an overdose

There is a strong relationship between substance use and **Mental Health**

Depression

You reported **severe** symptoms of depression

36% of **males** your age who come to Lives Lived Well also report experiencing severe symptoms of depression

Anxiety

You reported **moderate** symptoms of anxiety

25.1% of **males** your age who come to Lives Lived Well also report experiencing moderate symptoms of anxiety

Suicidal thoughts

You had thoughts that you would be better off dead or of hurting yourself in some way **Nearly every day** in the past two weeks.

Trauma

You have reported experiencing a traumatic event in your lifetime, and **you may be** experiencing posttraumatic stress.

61.5% of other LLW clients your age, also report experiencing a traumatic life event. Of these, **68.1%** report experiencing symptoms of posttraumatic stress.

Psychotic Like Experiences

You reported that in the past 12 months you experienced psychotic symptoms.

41.8% of other LLW clients your age, also reporting psychotic symptoms.
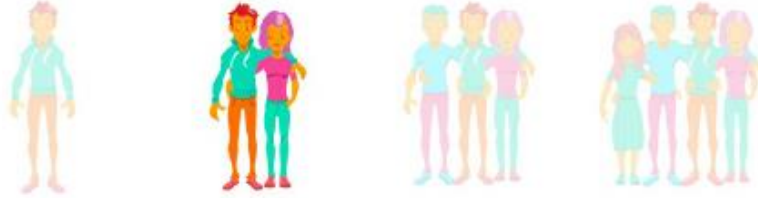
Chronic pain

You reported experiencing **severe pain** in the past week

We know that **35.7%** of other LLW clients your age also report experiencing chronic pain.

Only Dep/Anx in client feedback

Your results showed you **Sometimes** spent time with people who do not use drugs.

Your results showed that in the past 4 weeks..

Living
You were **homeless** and **were** at risk of eviction; and that .

Loneliness
Have been feeling lonely **Some of the time.**

Children
You **have** been the primary carer of children under 15 years of age and **had** involvement with child protection services.

Hospital
You did spend time in hospital for 1 day.

Violence
You **have** been violent to someone else. You **have** experienced someone being violent towards you and may be at risk of domestic and family violence.

Corrections
You **were arrested 1 time** and spent **1 day** in prison.

Your results showed your overall **physical health** as
1 out of **10**

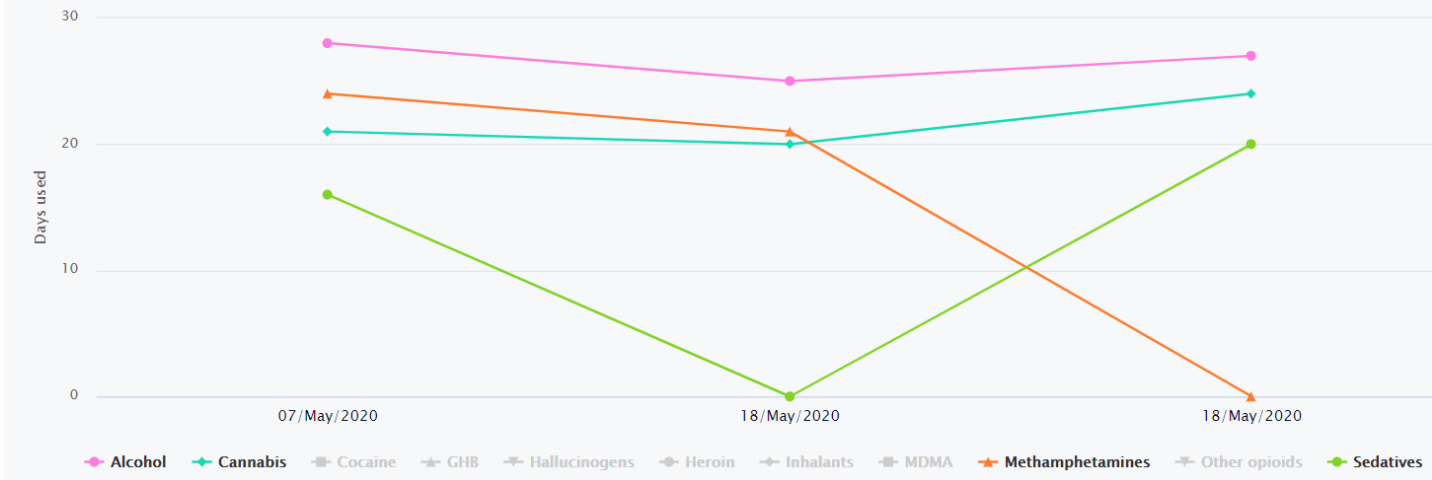Your results show rated your overall **quality of life** as **1** out of **10.**

Not in client feedback
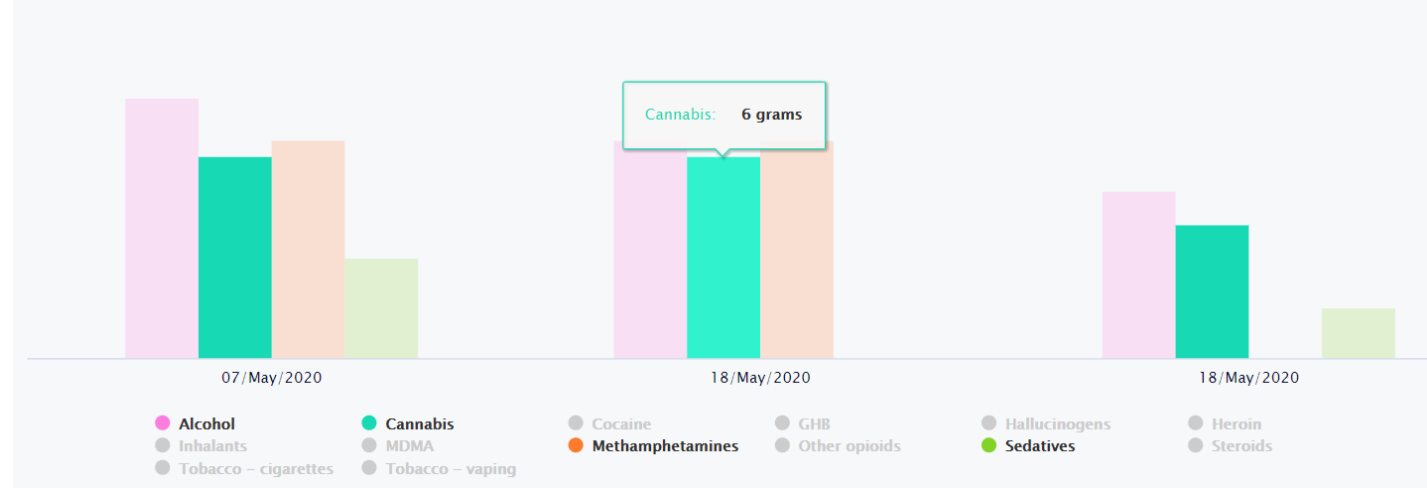
Progress Chart

Days Used In The Past 4 Weeks

This chart tells you how many days you have used alcohol and/or other drugs in the 4 weeks before you completed each survey.

Legend: ● Alcohol ◆ Cannabis ● Cocaine ● GHB ● Hallucinogens ● Heroin ● Inhalants ● MDMA ● Methamphetamines ● Other opioids ● Sedatives

Amount Typically Used

This chart tells you the typical amount of each substance you reported using at each survey point

Cannabis: 6 grams

Legend: ● Alcohol ● Cannabis ● Cocaine ● GHB ● Hallucinogens ● Heroin ● Inhalants ● MDMA ● Methamphetamines ● Other opioids ● Sedatives ● Steroids ● Tobacco – cigarettes ● Tobacco – vaping

	Other outpatient (Nov-20 to May-22)	FS Implementation (Nov-20 to Nov-21)	FS Sustainability (Dec-21 to Aug-22)
BL OM Comp/Sent	73%	62%	56%
% enquiries enrolled	49%	51%	56%
BL feedback received	?	80%	82%
1M OM complete	43%	*81%	35%
3M OM complete	23%	*64%	19%

*Collected by the research team

- OM's at enquiry: approx. 10% reduction in the % of BL OMs completed

- Little reduction in the number of enquiries who were enrolled in treatment

- ? Increased efficiency of enrolment process – 20% increase in % who received treatment

- FS benefits largely maintained during sustainability phase to date

  - Feedback – few clients saw a progress chart or received feedback at follow up

  - Lower 1 & 3M follow ups - ? Research influence

% BL OM Completion

OM sent after enquiry within:

64.8% one-two business days

% BL OM Completers Enrolled

Contacted after BL completion within:

89.1% one-two business days

% of clients requesting assistance with BL OM completion

Client report:

- 93% completed online survey alone
- 1.9% with counsellor via phone
- 4.7% with counsellor face-to-face

Clinician report: 'received assistance?'

5.6% 'yes, completed with counsellor'

Summary

- We successfully developed and implemented an online COM system with feedback

- Increased the capacity of LLW services to assess client outcomes
  - Matched OM sent & OM complete data *n*=24,935 (Nov 20-Nov 22)/ *n*=64,820 records

- OM Completion rates in outpatient services (n=11,360, Nov 20 – Aug 22)
  - Service Entry: 73%
  - 1 Month Follow up: 43%
  - 3 Month Follow up: 23%

- When COM delivered at enquiry phase in First Step:
  - 10% reduction in the % of BL COMs completed
    - but little impact on drop in % of enquiries enrolled
    - 20% more clients received treatment
  - ? may increase efficiency of enrolment process and increase access to treatment

Next Steps

Phase 4

- Increase the uptake and completion of COMs at follow up

  - Implementing client and service feedback
  - Including withdrawal, day and residential programs

  - Discrete choice experiment

- Cluster RCT First step being rolled out across all LLW services in 2023

- Use COM data to to fill gaps in the evidence base

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ICCs between BL ROMs delivered by interview & online self report surveys

- 101 young people in residential treatment for a SUD
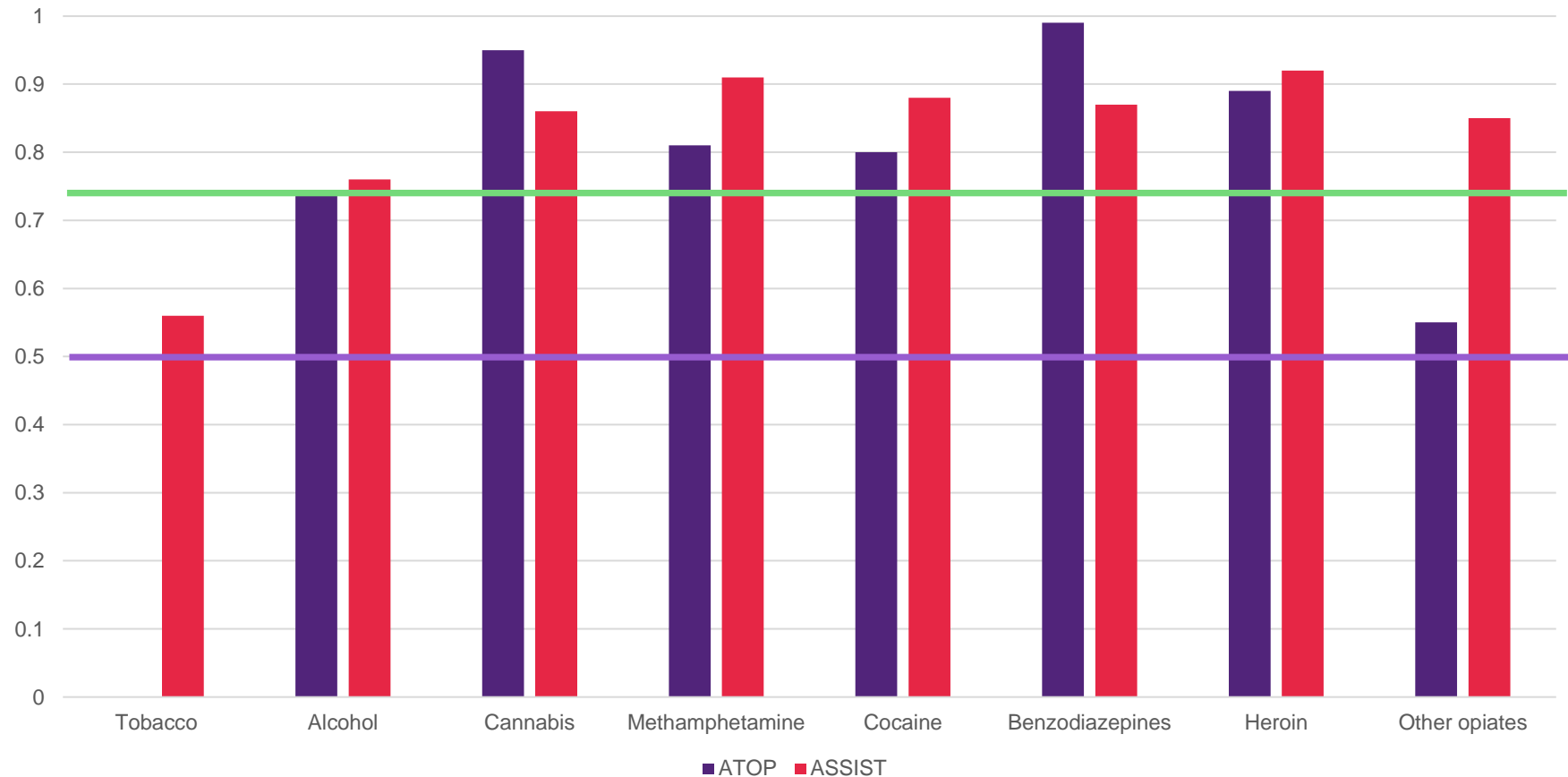
Developed, implemented and a brief intervention for reducing AOD use and mental health problems

- Co-designed with 8 counsellors, client representatives

- Implemented across four LLW outpatient services

- Baseline OM sent at enquiry and required completion prior to enrolment in treatment

Three modules (20-30 mins) delivered over 2 sessions

Module 1
- OM Feedback and Information

Module 2
- Motivational Enhancement
- Goal Setting:
  - Harm minimisation goal pr
  - Change goal

Module 3
- Risk Profiles
- Targeted Coping Skills Training
- Goal setting
  - Coping goal