From data to insights: Visualising AOD treatment outcomes across NGO services in NSW

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NADA
network of alcohol and other drugs agencies

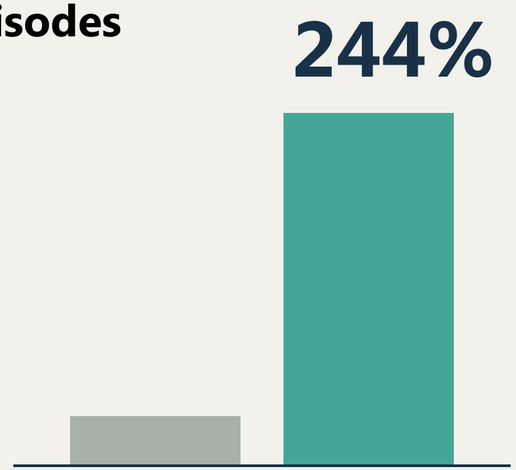
Outcomes dashboard

NADA

Multiple members

- Represents 85 members who provide services in over 100 locations,
- diverse in their structure, philosophy and approach to service delivery

Total episodes



244% increase in volume

- Data collection began in 2000
- Now includes 500,000 rows of treatment episode data

Impact

Data-driven care

- Where we are making progress
- Where there are gaps
- Where support is most needed

NADAbase Data Life Cycle

01 Data ingestion

- Includes data acquisition / collection at the service-level.
- 1st party data

02 Data storage

Data is stored in appropriate storage solutions, such as databases, data lakes, or cloud storage to increase productivity.

03 Data processing

- Include cleaning and transforming the data
- Data wrangling, data compression, data encryption
- Techniques: Stats modeling, AI, data mining

04 Data usage

Includes data validation / sharing such as data visualisation (Microsoft Power BI) to ensure relevant stakeholders understand the insights.

05 Data disposal

Disposal including Archiving where moving data from all active /environments into an archive.

Visualise NADAbase data

Power BI

Interactive graphs & charts

Bar, histogram, ribbon charts

Highlight key takeaways

Number of episodes with 1 or 2 outcomes measures

Color-coded sections

Green (improved), red (declined), grey (no change).

Trend comparison

Quarterly, by financial year

Keep it simple

Eight key domains

Service-level vs Sector-level

Outcomes dashboard

Measures

- **Real-time data**
- **Service-level**
- **Sector-level**

Outcomes Dashboard

89410
Episodes Open

88235
Episodes New

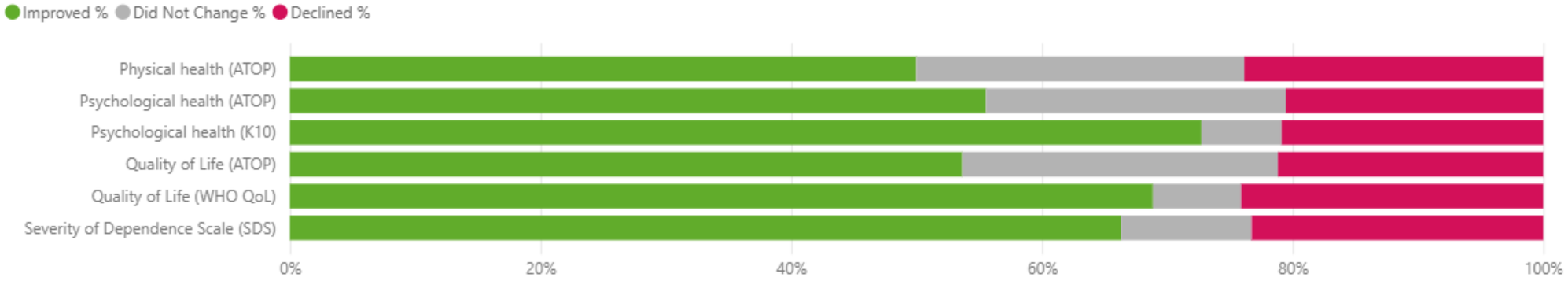
77976
Episodes Closed

24557
Episodes with at least 1 COMs

10997
Episodes with at least 2 COMs

690
Episodes with duplicate COMS

Percentage of Outcomes that Improved, Did Not Change or Declined



Outcome	Improved %	Improved	Did Not Change %	Did Not Change	Declined %	Declined	Improvement Average	Maximum Score	Episodes	Total Clients
Physical health (ATOP)	49.8%	1618	26.1%	847	23.8%	772	0.64	/10	3248	3027
Psychological health (ATOP)	55.2%	1793	23.8%	772	20.4%	663	0.93	/10	3246	3025
Psychological health (K10)	72.7%	6095	6.4%	537	20.9%	1750	6.65	/50	8380	7648
Quality of Life (ATOP)	53.5%	1736	25.1%	815	21.1%	685	0.90	/10	3247	3026
Quality of Life (WHO QoL)	68.9%	5834	7.0%	597	24.1%	2042	3.89	/40	8471	7748
Severity of Dependence Scale (SDS)	61.1%	4151	9.6%	652	21.4%	1456	2.88	/15	6793	6338

Date

7/1/2020 6/30/2025

Report on

Cessation

Outcomes dashboard

Measures

- **Real-time data**
- **Service-level**
- **Sector-level**

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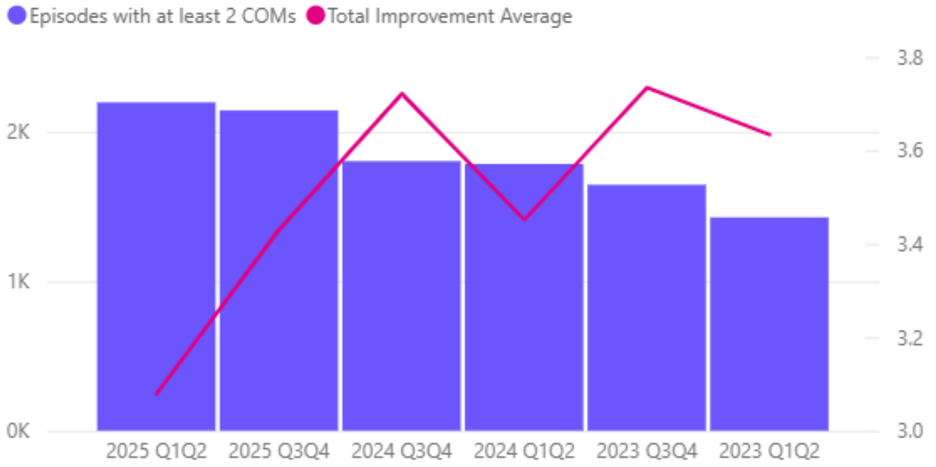
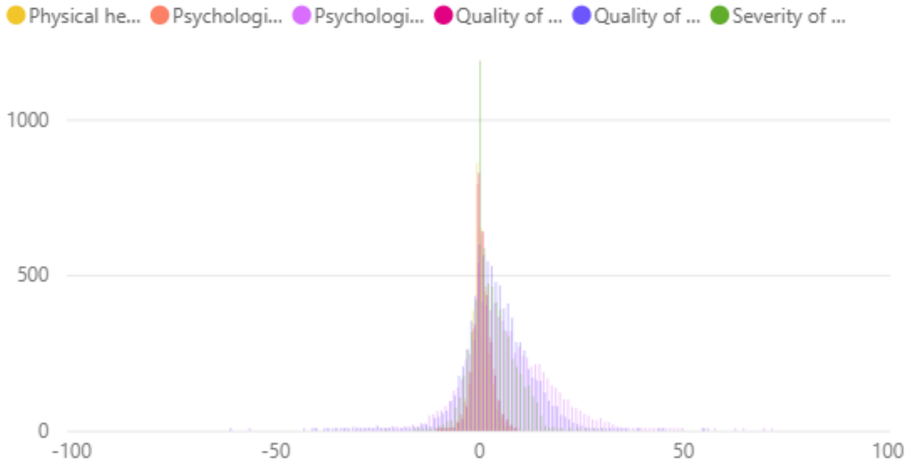
No data to display

Count of Episodes and Improvement Average by Cessation date



Count of Episodes by Improvement Scores and Outcome



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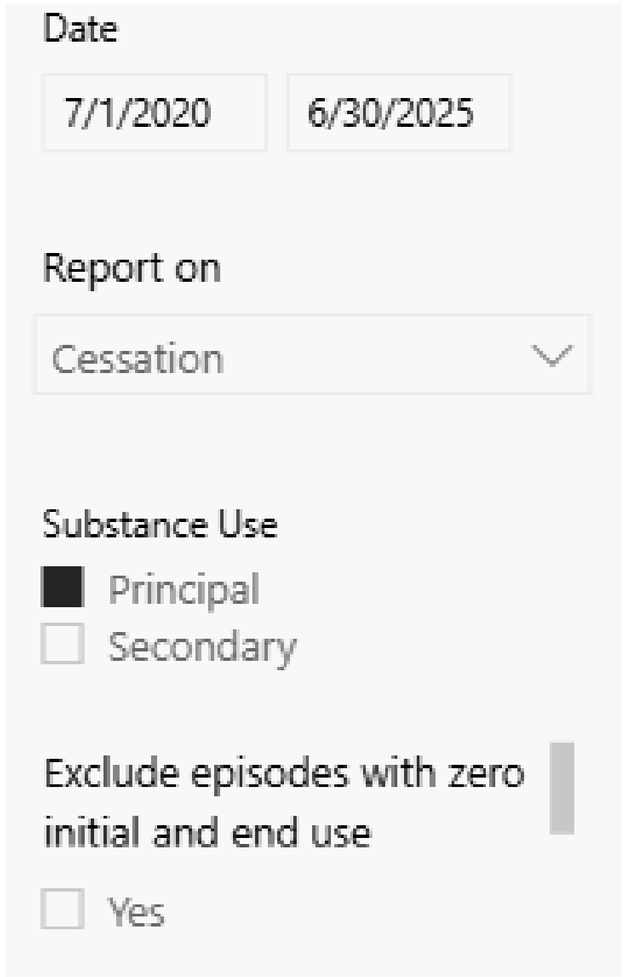
Primary vs. Non-Primary Substance

- By default, it shows data for the primary substance, aligning with Rob's KPI on primary substance use days.
- An option is available to view data for secondary substances, recognising that people may use more than one substance.



Changes Based on Starting Patterns

- Tracks episodes with no use at intake and no use at follow-up.
- Option to exclude these individuals from reports (since not all use all six substances).
- Default setting includes everyone, even those with zero use.

Outcomes dashboard

Measures

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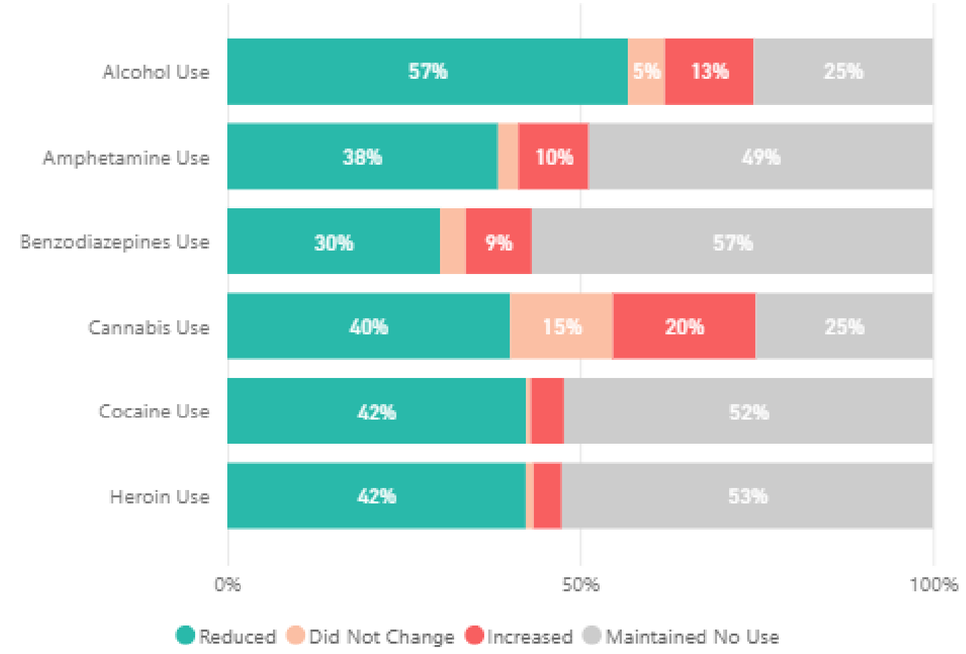
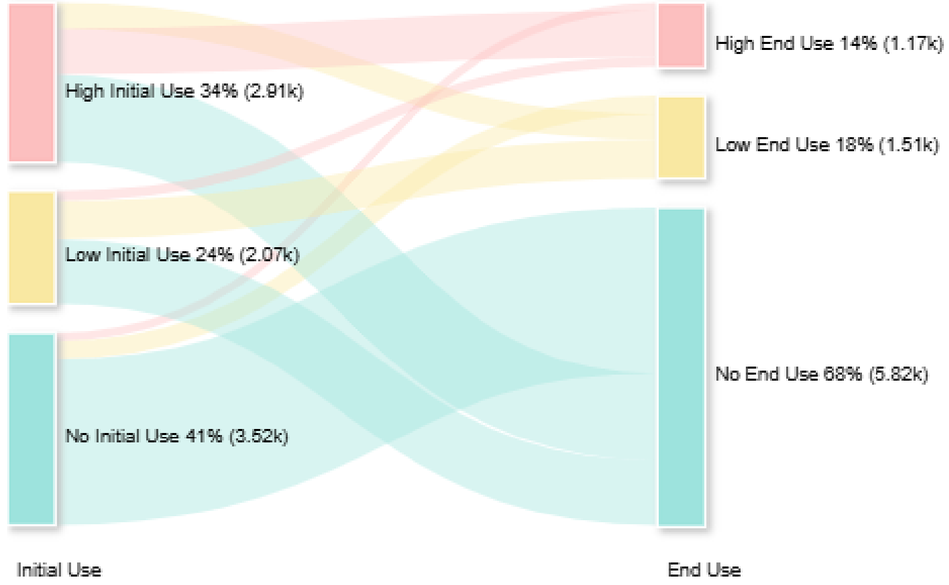
Changes in Number of Days of Drug Use



Changes in the Level of Drug Use

High Use (12 to 28 days), Low (1 to 11 days), No Use (0 days)



Change in Use, Days

- A reduction of 1 day is included in the calculation of the percentage of people who reduced their use.
- Allows measure to be more inclusive and sensitive to small changes

Change in Use, Level

- Intake categories:
  - No use,
  - Low use (1–11 days),
  - High use (12–28 days).
- Dashboard tracks changes relative to these starting levels.

NADAbase
Sustainability

Financial & technical sustainability

- Scalable infrastructure to handle data growth
- Regular maintenance (updates, patches, backups)

NADAbase support

- On-going training for staff & users
- Clear documentation and knowledge transfer

Governance & Policy

- Defined ownership, stewardship, and access controls
- Data strategy (in progress)

Next steps

NADAbase infrastructure upgrades

Data analytics work

Projects-driven to inform services delivery & care

Data governance

Data security & compliance