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The Australian Alcohol Treatment Outcome Measure (AATOM-C): Findings of the 12-month feasibility study

NDARC Technical Report No. 296

THE AUSTRALIAN ALCOHOL TREATMENT OUTCOME MEASURE (AATOM-C): FINDINGS FROM THE 12 MONTH FEASIBILITY STUDY

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Technical Report Number 296

ISBN: 978 0 7334 2653 7

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ACKNOWLEDGEMENTS

The Australian Alcohol Treatment Outcome Measure (AATOM) is being conducted by the National Drug and Alcohol Research Centre in collaboration with Turning Point Alcohol and Drug Centre Inc. The project is funded by the Alcohol Education and Rehabilitation Foundation Ltd.

The authors would like to thank the AATOM advisory group members for their input and advice regarding the structure and content of the AATOM instruments; the Network of Alcohol and other Drug Agencies (NADA) for their assistance in recruiting treatment agencies into the project; and the clinical staff and workers at participating alcohol treatment agencies for their interest and enthusiasm in becoming involved in the feasibility phase of the AATOM-C project and their valued help in the recruitment of participants.

A special thanks also to Nicola Thomson and Madonna Devaney for co-ordinating the study site in Victoria and to Sanja Pohoki and Peter Gates who assisted in conducting AATOM-C baseline and follow-up interviews.

EXECUTIVE SUMMARY

Increasing pressure is being placed on health-care providers within the alcohol and other drugs (AOD) sector to demonstrate objective treatment outcomes and effectiveness of the services they provide. To respond to the needs of the treatment sector, current, comparable and accurate information is needed. Within the current Australian treatment field, there is a limited range of brief, multi-dimensional clinical instruments specific to the routine measurement of alcohol treatment outcomes. The Australian Alcohol Treatment Outcome Measure for Clinicians (AATOM-C) was created to assist in addressing this gap.

The aim of this study was to assess the feasibility of implementing and conducting the AATOM-C, a brief and psychometrically sound clinical instrument, within the context of specialist alcohol treatment services in Australia over a period of 12 months.

The study involved both clinicians and researchers administering the AATOM-C interview to clients on a routine basis. Clinicians were required to administer the AATOM-C to clients at baseline, three and 12 months from baseline. Participants interviewed by researchers were randomly assigned to either minimal follow-up (MFU) or frequent follow-up (FFU) groups. Those in the MFU group were administered the AATOM-C at baseline and 12 months later, and those in the FFU group were administered the AATOM-C at baseline, three, six, nine and 12 months from baseline.

There were three study hypotheses:

1. All client groups will demonstrate statistically significant improvements in outcome from baseline to three months and baseline to 12 months.
2. Clients interviewed by clinicians will report significantly greater improvement at three months than clients interviewed by researchers at three months.
3. Clients who were administered the full AATOM-C at three, six, nine and 12 months will report significantly greater improvement in treatment outcome at 12 months than those who were interviewed only at baseline and 12 months.

A total of 348 clients new to alcohol treatment took part in this study. Of those, 148 were interviewed by clinicians in Sydney and 200 were interviewed by researchers in Sydney and Melbourne. Overall, the researcher FFU group were most successfully followed up over the 12 month period (63% at 12 months), with clinicians only successfully following up 30% of clients at 12 months.

Results of the study indicate that clients receiving treatment for alcohol use exhibit significant improvement in treatment outcome over time across a range of core outcome variables measured by the AATOM-C instrument. This signifies that the instrument is capable of measuring clinically meaningful changes in client outcome over time.

Findings from the study also suggest that clients do not report significantly greater improvement in treatment outcome at follow-up when interviewed by their treating

clinicians as opposed to an independent interviewer. It therefore can be assumed that changes in outcome detected using the AATOM-C are indicative of real changes, and not arising from a social desirability effect.

In addition to this, the frequency of follow-up was not found to play a significant role in improving treatment outcome over time. This suggests that the administration of the AATOM-C interview itself over time did not act as a type of brief intervention producing change and therefore the number of follow-up interviews administered to the client can be left to the discretion of the treating clinician who is monitoring the individual for case management purposes between three and 12 months post treatment.

Overall results of this study indicate that the AATOM-C can be used successfully and confidently within Australian alcohol treatment services as a routine measure of alcohol treatment outcome.

1.0 INTRODUCTION

The public health impact of alcohol use in Australia and across the developed world is substantial and costly, with alcohol-use disorders ranking among the top 10 leading causes of burden of disease for high-income earning countries (Collins & Lapsley, 2008; Lopez et al., 2006). In 2004, the World Health Organisation (WHO) estimated that of the two billion people worldwide consuming alcohol; approximately 76.3 million have a diagnosable alcohol-use disorder (WHO, 2004).

Given the substantial outlay of public and private funds, healthcare providers within the alcohol and other drug (AOD) sector are coming under increasing pressure to demonstrate objective treatment outcomes and effectiveness of the services they provide. Current, comparable and accurate information is needed to respond to the needs of the alcohol treatment sector. A standardised approach to treatment evaluation and case management will assist in the establishment of alcohol treatment benchmarks and provide a mechanism for comparing treatment types across a range of settings.

While there has been a number of initiatives to develop outcome monitoring tools for drug and alcohol treatment – for example, the Opiate Treatment Index (Darke et al., 1992); Treatment Outcome Profile (Marsden et al., 2007); Addiction Severity Index (McLellan et al., 1980) – such tools have focused primarily on illicit drug use and treatment outcomes. In Australia, the Brief Treatment Outcome Measure (BTOM) was the first national initiative to introduce ongoing outcome monitoring into routine clinical practice. The BTOM, however, is not sufficient for use within alcohol treatment services due to its lack of detail on alcohol use patterns (i.e. binge drinking), concentrating again on the area of illicit drugs. To date, a limited range of brief, multi-dimensional clinical instruments, specific to the routine measurement of alcohol treatment outcomes are available.

The Australian Alcohol Treatment Outcome Measure for clinicians (AATOM-C) was developed to fulfil the demand for a brief, standardised, psychometrically sound, and nationally consistent clinical tool specific to alcohol. To achieve this, key features in the design of the AATOM-C were that it: 1) be brief and easy to administer; 2) measure treatment outcome across a range of client functioning; 3) have good reliability, validity and sensitivity to measuring change in outcome over time; 4) be able to be integrated into existing data collection practices and reporting requirements; and 5) be broadly accepted, and appropriate for use by treatment providers across the AOD field.

Clinically focused, the AATOM-C was designed to measure treatment outcome across the domains of health and well-being, alcohol and drug use, alcohol dependence, treatment goals and health service utilisation, whilst taking into account differences in client characteristics, treatment settings and services. Additionally, the AATOM-C was created to assist in documenting the effectiveness of treatment, informing changes in service provision and with the flexibility of its use for both "one off" and ongoing monitoring of treatment.

Psychometric testing of the AATOM-C has revealed the instrument has overall good psychometric properties. Please refer to Simpson et al (2007) for detailed information

regarding the content, development and psychometric testing of the AATOM-C (Phase 1 and 2 of the study). This report will focus primarily on the findings of the 12-month feasibility Study (Phase 3).

1.1 Aims and hypotheses

The overall aim of the AATOM project was to develop a reliable and valid alcohol treatment outcome measurement tool to serve the needs of health professionals and their clients, policy makers, funding bodies and the research community. In addition, the development of a standardised alcohol treatment outcome measure will substantially advance the evidence base for alcohol treatment, and provide comparability between different treatment outcome studies.

The AATOM project was divided into three stages of development: Phase One: Literature Review and Content Development; Phase Two: Reliability and Validity Testing and Phase Three: Feasibility study. The aim and hypotheses of Phase Three are outlined below.

1.1.1 Aim

To ascertain the feasibility of implementing and conducting the AATOM-C as a brief, valid and reliable alcohol treatment outcome measure within the context of specialist alcohol treatment services in Australia.

1.1.2 Hypotheses

1. All client groups will demonstrate statistically significant improvements in outcome from baseline to three months and baseline to 12 months.
2. Clients interviewed by clinicians will report significantly greater improvement at three months than clients interviewed by researchers at three months.
3. Clients who were administered the full AATOM-C at three, six, nine and 12 months will demonstrate significantly greater improvement in treatment outcome at 12 months than those who were interviewed only at baseline and 12 months.

2.0 METHOD

2.1 Participants

To assess the feasibility of implementing the AATOM-C into routine clinical practice, a convenience sample of 348 participants was recruited from 19 AOD treatment agencies in Sydney and Melbourne. The majority of participants came from residential rehabilitation services (59.8%). All participants were within their first two weeks of treatment and had a current concern for their alcohol use. Participant demographic characteristics are discussed in more detail in Section 3.2.

2.2 Materials

Materials used within the feasibility arm of the AATOM study are described below:

1. AATOM-C baseline interview (section 2.2.1)
2. AATOM-C follow-up interview (section 2.2.2)
3. The E-AATOM (section 2.2.3)
4. AATOM-C administration and procedure manuals (section 2.2.4)
5. Clinician assessment and feedback survey (section 2.2.5)

2.2.1 AATOM-C baseline interview

The AATOM-C interview is comprised of five sections assessing: client demographic and treatment information; health and well-being; alcohol use; other drug use; and health service utilisation. Please refer to Simpson et al (2007) for a more detailed description of the baseline interview, including results of the psychometric testing of the AATOM-C.

Before commencing the AATOM-C baseline interview, all participants were provided with an information and consent form and informed verbally about the study. Participants were made aware that they would be contacted throughout the next 12 months to complete a number of follow-up interviews (ranging from one to four). Participants were also asked to complete a locator information form to facilitate follow-up. This form collected client details such as name, phone number, current address, where they expected to be living in the next 12 months and, finally, contact details of a relative or friend who would know how to contact them if necessary. Participants were ensured privacy of all contact details, and that the storage of all forms would be kept separate from interview data. Signed consent was obtained before the interview began.

2.2.2 AATOM-C follow-up interview

The follow-up AATOM-C contained a number of additional items to that of the baseline interview in order to gauge a further understanding of the participant's treatment experiences over the following 12 months. The additional items are described briefly below. Please note the AATOM-C interview attached as Appendix One reflects a newly combined (baseline and follow-up) revised version of the interview of which the following structure represents.

Structure of the follow-up interview:

Section A: Demographic details
Section B: Health and well-being
Section C: Alcohol use
Section D: Other drug use
Section E: Health service utilisation
Section F: Treatment specific
Section G: Personal circumstances

Section C: Item 20

As an additional question to the alcohol-use section, participants were asked to select a response for a list of three statements describing how they were currently feeling about their alcohol use.

Section F: Items 34-35.

Section C has been included to gain an understanding of the participant's treatment seeking and experiences over the three months prior to interview. During follow-up, participants were asked whether they had left their baseline treatment episode and, if so, were they referred onto a different treatment type. Participants who indicated they had left their baseline treatment were asked to select from a list of options of why they had left. Responses included: treatment completion, left against advice, involuntary discharge etc.

Section F: Item 36.

Participant treatment experiences during the three months prior to follow-up interview were recorded on a table adapted from the Australian Treatment Outcome Study (ATOS) follow-up questionnaire (Ross et al., 2002).

Part A. Participants were asked to indicate how many times in the past three months they had started each of the listed treatment types (counselling, detoxification, residential rehabilitation, therapeutic communities and other).

Part B. If the participant had started one of the treatments listed in Part A, they were then asked to state how long each treatment episode lasted for.

Part C and D. Participants were also asked how long ago they had attended the stated treatment type and whether they had completed each of the treatment episode/s.

Section F: Item 37
This question was only applicable to participants who had received counselling for alcohol use in the three months prior to follow-up interview.

Part A. Participants were asked how many weeks they attended counselling for alcohol use in the past three months.

Part B. Participants were then asked to provide the average number of counselling sessions they had received per month.

Part C. In addition, participants were also asked to specify the primary type of counselling they had received in the past three months as either a group program, individual or family counselling.

Section F: Item 38
This question was only applicable to participants who had received residential treatment for alcohol use in the three months prior to follow-up interview.

Part A. Participants were asked whether they had consumed any drinks containing alcohol since being admitted to residential treatment.

Part B. If the participant indicated they had had a drink, they were then asked how many days from discharge this occurred. If the participant suggested that they had had a drink whilst still in treatment, the number of days is recorded was "0".

Section G: Item 39
Part A. Participants were asked to indicate whether there had been a time in the past three months where they were unable to attend treatment for alcohol use. Such reasons could include being held in custody or gaol, being injured, incapacitated or other.

Part B. If the participant suggested that there was a time when they were unable to attend treatment during the previous three months, they were also asked to nominate the number of days they were unable to attend.

Section G: Item 40
If the participant had received any treatment in the previous three months, they were asked to give an overall treatment satisfaction rating on a Likert scale ranging from 0 (Not at all satisfied) to 10 (Completely satisfied).

2.2.3 The electronic version of the AATOM-C (E-AATOM)

The E-AATOM was developed to assist in the facilitation of routine data collection. It was designed to automate data collection, collation and reporting and thereby substantially reduce the burden of administration on clinicians. Features of the E-AATOM include the automatic generation of a score summary sheet (which is printable), the de-identification of data, and the ease of using a single secure database accessible across multiple treatment sites. Data collected using the E-AATOM were transferred with ease into statistical packages (i.e.

Microsoft Excel and the Statistical Package for the Social Sciences) for data-analysis purposes.

2.2.4 Administration and procedure manuals

Administration and procedure manuals for both the paper and electronic version of the AATOM-C were developed to aid in the standardisation and facilitation of the instrument. The manuals were designed to act as step-by-step guides to the administration of the instrument, including how to conduct the interview and score relevant sections. Installation, troubleshooting and operational instructions were included within the E-AATOM guide. All agencies involved in the study were given copies of the manuals to keep for their own perusal.

2.2.5 Clinician assessment and feedback survey

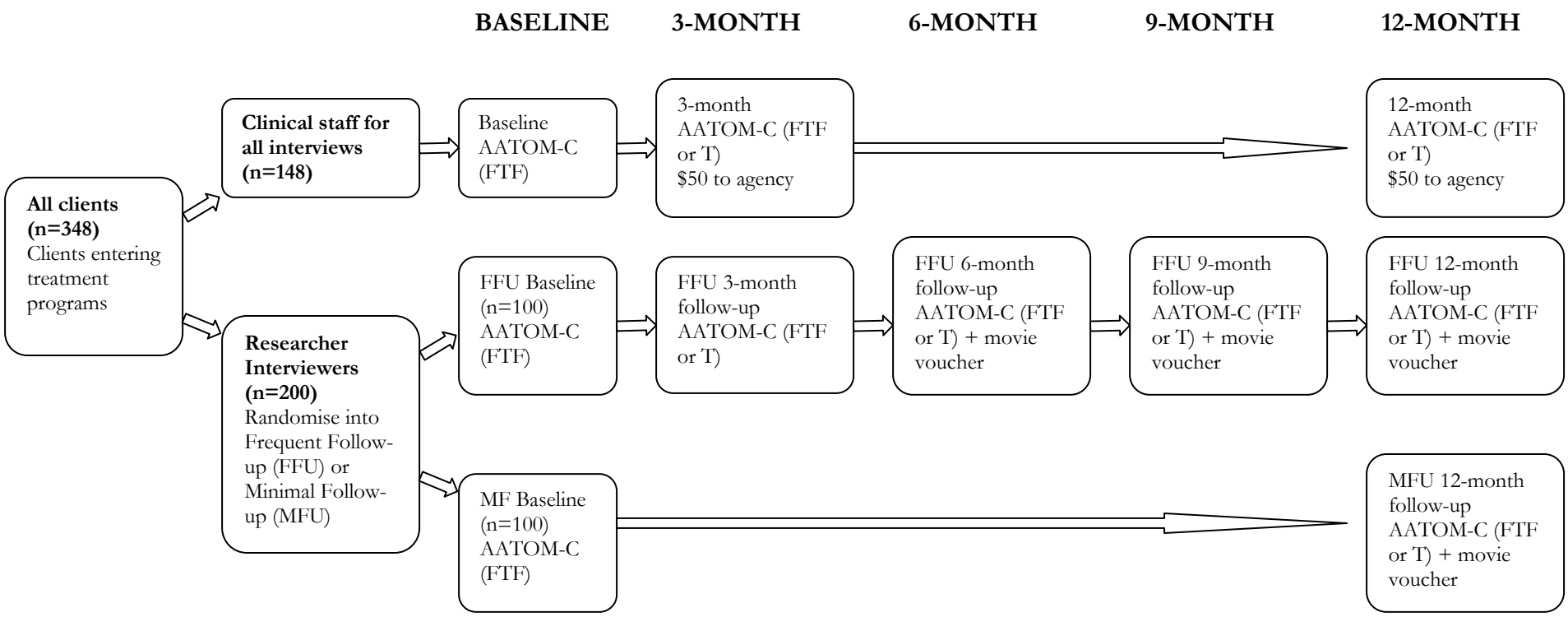
The clinician assessment and feedback survey was developed to assess the attitudes and experiences of clinical staff using the AATOM-C within alcohol treatment services. It was designed to elicit feedback about the usefulness of the instrument, the appropriateness of the content, any benefits associated with using the E-AATOM, and strategies/barriers associated with implementing the outcome measure. In total, the survey contained 34 questions, including eight free-response questions and 26 five-point Likert scale items (ranging from 1: "strongly disagree" to 5: "strongly agree"). Professional details including position title, relevant qualifications, number of years worked within the AOD field and number of AATOM-C interviews administered were also collected in addition to age and sex of the respondent.

2.3 Procedure

Participants were recruited from a total of 19 AOD treatment agencies in Sydney and Melbourne: 10 residential rehabilitation services (some incorporating withdrawal programs), three therapeutic communities, two counselling services and four detoxification services. Participants were assigned to one of three groups: two groups (n=200) were interviewed by researchers (assigned randomly into frequent follow-up (FFU) (n=100) and minimal follow-up (MFU) (n=100) and one group (n=148) was interviewed by clinicians trained in the administration of the AATOM-C. Please refer to the flow chart below (Figure 1). Recruitment procedures will be discussed in more detail in the sections below.

Institutional ethics approval was granted for the study from the University of New South Wales Human Research Ethics Committee and participating treatment agencies where required. Baseline data collection took place between April 2006 and February 2007.

Figure 1: Feasibility study outline



2.3.1 Recruitment of treatment agencies

Following the development of the AATOM-C instrument, a search for AOD treatment agencies offering alcohol treatment within residential rehabilitation, therapeutic communities and counselling services was conducted. Primarily, the Network of Alcohol and Other Drugs (NADA) online database was used to identify agencies whose clients would be eligible to participate in the study. However, once this list had been exhausted, a general internet search for AOD agencies within the greater Sydney region and Melbourne was conducted.

Information packs (which included the offer of a free information session about the AATOM project) were sent either via email or post to co-ordinators of eligible AOD treatment agencies. Twenty agencies responded with interest to the offer and were provided with an information session outlining the project and the opportunity to be involved in either the psychometric or feasibility phase or both. If involvement in the feasibility study appealed to the agency, a further information session was conducted to explain the administration and implementation guidelines for the AATOM-C instrument in both paper and electronic format.

A total of 19 AOD treatment agencies across a range of treatment settings in Sydney (n=14) and Melbourne (n=5) became involved in the feasibility phase of the AATOM project. Treatment settings included 10 residential rehabilitation services, three therapeutic communities, two counselling services and four detoxification services. Of those, nine agencies in Sydney expressed interest in collecting their own data as part of the "clinician-interviewed" component field testing of the AATOM-C.

2.3.1.1 Training of treatment agency staff

A further information and training session was conducted with treatment agencies interested in collecting their own data, to outline AATOM-C administration and data collection procedures. Both the paper and electronic versions of the instrument were examined step by step to ensure the AATOM-C was understood and correctly administered by agency staff. Copies of the administration and procedure manuals were provided to agency staff for future reference (Refer to Appendices one, two and three). To ensure the standardisation of data collection, training sessions were compulsory for all staff who intended on conducting AATOM-C interviews for the purposes of the AATOM project. National Drug and Alcohol Research Centre (NDARC) research officers were available throughout the length of the project to contact for help regarding administration and technical issues.

2.3.2 Recruitment of participants

Participants recruited for the feasibility study came from a range of alcohol treatment services in Sydney and Melbourne. Before participating, all participants were advised that their decision of whether or not to participate in the study was voluntary and would not affect their relationships with their treatment agencies in any way. Eligible participants were required to:

- be within their first two weeks of treatment;
- have a current concern for their alcohol use (alcohol did not, however, need to be their primary drug of concern for treatment purposes);
- indicate they had not had treatment for alcohol-related problems in the one month prior to interview (detoxification was not included as prior treatment); and
- give informed consent prior to being interviewed; clients under the age of 18 were required to have signed consent from a parent/guardian before participating.

Researchers attended 16 alcohol treatment agencies in Sydney and Melbourne to recruit participants face-to-face for the researcher-interviewed component of the study. A regular recruitment day was set each week for agencies with a large intake of clients; for all other agencies, the research interviewer would call each week to check if any new potential participants were available to interview before visiting. Once at the agency, participants were assessed for eligibility, informed about the study and were asked to provide consent for the baseline interview and follow-up interviews that would take place in the successive 12 months. Participants were also informed that they would not receive any reimbursement for completing the baseline and three-month interviews; however, for the six, nine and 12 month follow-up interviews, they would receive two movie tickets. Clients interviewed in Melbourne (n=50), however, did receive reimbursement at the three-month follow-up time point.

To further assess the feasibility of implementing the AATOM-C into alcohol treatment services, clinicians and AOD workers also conducted the AATOM-C interview with clients on a regular basis. The process of implementing the AATOM-C was individualised to each treatment agency to best fit in with current admission practices. A number of participating agencies did find it more feasible to incorporate the interview into their own assessments. Participating treatment agencies were fully trained in the administration of the instrument and were provided with support manuals. To ensure a true feasibility trial, treatment agencies were only reminded of the follow-up interviews that were due by researchers at the beginning of each month via email. Nine alcohol treatment agencies within the Sydney region took part in this component of the study.

Participants interviewed for the feasibility phase within New South Wales (NSW) fell into three groups: researcher-interviewed with FFU, researcher-interviewed with MFU and clinician-interviewed; these groups will be explored in more detail below.

2.3.2.1 Researcher-interviewed participants – FFU (n=100)

Half of the participants interviewed by trained researchers were randomly assigned to the FFU group. Interviews were conducted with participants every three months: at baseline, three, six, nine and 12 months later. All interviews were conducted face-to-face if the client

was still in treatment or over the phone if the client had left at the time of follow-up. As a last resort, a paper copy of the interview was posted to the client with a return-addressed, stamped envelope enclosed. To allow for a valid comparison between groups, no reimbursement was given for baseline and three-month interviews; however, for each interview completed after three months, participants received a double movie voucher valued at approximately $30. If a participant did not complete any one of the previous follow-up interviews, he or she was still eligible to complete later follow-up interviews.

2.3.2.2 Researcher-interviewed participants – MFU (n=100)

Half of the participants interviewed by researchers were randomly assigned to the MFU group. For this group, interviews were conducted at baseline and 12 months later. Similar to the FFU group, all interviews were conducted face-to-face if the client was still in treatment or over the phone if the client was not. Interviews were also posted in the mail if phone contact could not be made. Participants within this group received a double movie voucher for successful completion of the 12 month interview.

2.3.2.3 Clinician-interviewed participants (n=148)

Clinicians trained in the administration of the AATOM-C interviewed clients at baseline, three and 12 months later. All interviews were conducted face-to-face where possible or over the phone if the client had left treatment. For all successful follow-up interviews conducted by clinicians, the treatment agency was reimbursed $50. This was an estimated amount to cover the cost of the clinician's time for contacting the client, conducting the interview, entering or submitting the completed data, and the cost of phone calls and stationary. Participants in this group did not receive any reimbursement for participating. If a participant did not complete any one of the follow-up interviews, he or she was still eligible to take part in later follow-up interviews.

2.3.2.4 Clinician assessment and feedback survey

Upon completion of baseline data collection, a survey assessing the experiences and attitudes of clinicians and AOD workers using the AATOM-C within a clinical setting was distributed to all treatment agencies involved in the feasibility testing phase. The survey was distributed to all nine participating treatment agencies, in which 34 staff were eligible to complete the survey. The majority of agencies participating in the feasibility study were residential rehabilitation services (71%). A designated staff member (typically the point of contact for the AATOM project) for each agency was responsible for issuing and retrieving completed surveys. It was ensured that all information contained within the surveys would remain confidential and individual respondent names were not recorded.

2.4 Data analysis

Baseline and follow-up interviews

Descriptive and inferential statistics were generated for variables of interest. Where data was highly skewed, medians were reported. Means were reported for normally distributed data. To assess differences between groups and over time, independent and paired samples t tests were used for non-skewed data. For skewed data, Mann Whitney U and Wilcoxon Signed Rank Tests were used. Chi square was used to assess categorical variables. All data was analysed using SPSS for Windows version 15.0 (SPSS, 2006).

Clinician assessment and feedback survey

A descriptive analysis of Likert scale (ordinal) data was conducted to assess the opinions and attitudes of clinical staff using the instrument in addition to a simple thematic analysis of the short response questions.

3.0 RESULTS: PART ONE

3.1 The baseline sample

A total of 348 participants were interviewed at baseline. Of those, 200 participants were interviewed by researchers in Sydney (n=150) and Melbourne (n=50), with a further 148 participants interviewed by clinicians and AOD workers in Sydney alcohol treatment services. The majority of participants interviewed at baseline by both researchers (56.5%) and clinicians (64.2%) were recruited from residential rehabilitation services.

Table 1: Baseline service type

Service type (%)	Clinician interviewed (n=148)	Researcher interviewed (n=200)		All participants (n=348)
		MFU (n=100)	FFU (n=100)	
Residential rehabilitation (RR)	64.2	60.0	53.0	59.8
Therapeutic community (TC)	20.9	10.0	20.0	17.5
Counselling (C)	14.9	2.0	3.0	7.8
Detoxification (D)	0.0	28.0	24.0	14.9

3.2 Demographic characteristics

At baseline, the mean age of the participants was 36.9 years (SD 12.2, range 14-77 years), and 55.1% were male. The majority of participants were born in Australia (84.8%) with 7.6% of participants indicating they had an Aboriginal or Torres Strait Islander background. The entire sample (n=348) preferred to speak English at home.

The majority of participants (57.6%) reported a government allowance to be their main source of income, with less than a third of participants (29%) receiving a wage/salary prior to being interviewed. Participants interviewed by researchers were more likely to report employment as their main source of income than those interviewed by clinicians (x^2=5.929, p<0.015).

Participants reported living alone (31.4%) or with their parents (20.5%) as their usual living arrangement. The two most common sources of accommodation were a rented house/flat (51.6%) and a privately owned house/flat (38.9%). By comparison, males were significantly more likely to be living alone (x^2=4.091, p=0.043) or with their parents (x^2=10.308, p<0.001) than females. Participants assigned to the MFU group were also significantly more likely to be living alone than those in the FFU group (x^2=5.050, p=0.025).

Table 2: Baseline demographic characteristics

	Clinician interviewed (n=148)	Researcher interviewed (n=200)		All participants (n=348)
		MFU (n=100)	FFU (n=100)	
Age (yrs)				
Mean yrs (SD)	35.5 (13.3)	37.8 (11.9)	38.2 (10.8)	36.9 (12.2)
Range (yrs)	14-66	19-77	18-62	14-77
Sex (%)				
Male	51.7	61.0	54.0	55.1
ATSI (%)				
Aboriginal	10.4	6.0	4.0	7.3
Aboriginal or Torres Strait Islander	0.7	0.0	0.0	0.3
Country of birth (%)				
Australia	84.5	85.0	85.0	84.8
Spoken language (%)				
English	100.0	100.0	100.0	100.0
Prior treatment for alcohol use (%)				
Yes, in the last 3 months	28.1	14.0	22.0	39.1
Yes, but more than 3 months ago	18.7	50.0	43.0	18.3
Yes, currently in additional treatment	19.4	2.0	2.0	9.2
Income (%)				
Employment	22.4	32.0	37.0	29.4
Temporary benefit*	31.3	35.0	30.0	32.0
Pension*	25.2	24.0	28.0	25.6
Other	21.1	9.0	5.0	12.9
Living arrangement (%)				
Alone	28.6	41.0	26.0	31.4
Parents	21.1	17.0	23.0	20.5
Spouse/partner	10.9	8.0	19.0	12.4
Spouse/partner/child(ren)	12.9	11.0	6.0	10.4
Alone with child(ren)	12.2	10.0	7.0	10.1
Other	14.3	13.0	19.0	15.3
Accommodation (%)				
Rented house/flat	54.4	54.0	45.0	51.6
Privately owned house/flat	36.7	38.0	43.0	38.9
Boarding house	3.4	3.0	5.0	3.7
Hostel	1.4	1.0	2.0	1.4
Other	4.1	4.0	5.0	4.4

* Government allowance (temporary benefit includes sickness, unemployment, newstart etc; pension includes aged, disability and parenting.)

3.2.1 Previous alcohol treatment experiences

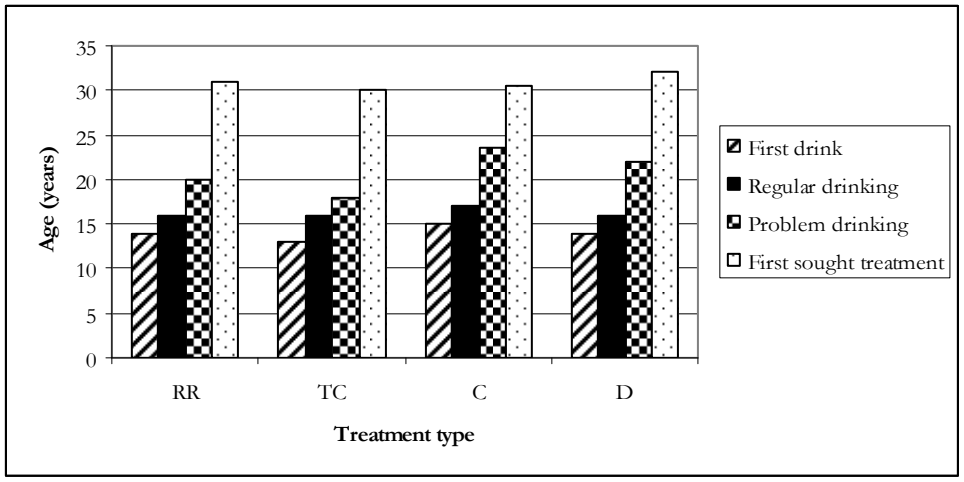
Two-thirds of all participants had received treatment for alcohol related problems prior to their current treatment episode. Approximately 18% of all participants had attempted or completed a treatment episode within the last three months. To allow true baseline interview scores for the participant's current treatment, participants who had received treatment for alcohol use in the last month (30 days) were not eligible for the study.

3.3 Lifetime history of alcohol use

Participants reported drinking their first full serve of alcohol at a median age of 14 years, with regular drinking beginning during the participants' mid to late teens (median age=16). The participants first recognised their alcohol use to be a problem at 20 years old (median); however; they did not access treatment for another 11 years, until 31 years old (median). The age at which participants experienced each alcohol time point (mentioned above) differed significantly: age of first drink to age of regular drinking ($z=-13.626$, $p<0.001$); age of regular drinking to age of problem drinking ($z=-13.641$, $p<0.001$); and age of problem drinking to age first sought treatment ($z=-14.878$, $p<0.001$). See Figure 2 below.

Male participants (median age=14) were found to have been initiated to alcohol at a significantly younger age than the female participants (median age=15 years, $z=-2.180$, $p=0.029$) and were also found to have begun drinking regularly at a younger age (median=16 years) than female participants (median=17 years, $z=-2.031$, $p=0.021$).

Figure 2: Lifetime history of alcohol use



* RR = Residential rehabilitation services, TC = Therapeutic communities, C = Counselling services, D = Detoxification services

3.4 Baseline alcohol use and dependence

3.4.1 Baseline alcohol use

The majority of participants interviewed by both researchers and clinicians had used alcohol in the previous one month (n=291). Of those, participants reported drinking 20 standard drinks per day on 18 days in the past month (median scores). Overall, male participants reported drinking a significantly larger number of standard drinks per day in the past month (22 drinks) than female participants (11 drinks) ($z=-6.865$, $p<0.001$).

The number of drinking days and standard drinks consumed at baseline differed significantly across the four treatment types ($x^2=31.576$, $p<0.001$). Participants recruited from detoxification services were consuming alcohol more frequently and in larger amounts (median=25.5 drinks per day over 25.5 days) than those recruited from the other service types.

The majority of both males (96.2%) and females (95.6%) reported at least one day of binge drinking in the past 30 days. Males, who reported drinking seven or more standard drinks on the same day, did so on 21 days (median) in the past month. Females, who reported drinking five or more standard drinks on the same day, did so on 18 days (median) in the past month. Females interviewed by researchers reported a significantly higher number of binge drinking days (22.5 days) than those interviewed by clinicians (15.0 days) ($z=-2.021$, $p<0.001$). Both male and female participants recruited from detoxification services reported a significantly higher number of binge drinking days than participants from other service types (males: $x^2=21.143$, $p<0.001$; females: $x^2=15.769$, $p<0.001$).

Table 3: Baseline alcohol use

In the past 30 days:	Clinician interviewed (n=148)	Researcher MFU (n=100)	Researcher FFU (n=100)
Drinking alcohol (%)	84.5	85.0	81.0
Median days of alcohol use	20.5	21.0	20.0
(range)	(1-30)	(1-30)	(1-30)
Median number of standard drinks	12.0	22.0	20.0
consumed (range)	(1-114)	(2-73)	(3-58)
Binge drinking males (n)	59	48	43
Median days of binge drinking males	22.0	23.0	20.0
(range)	(1-30)	(1-30)	(1-30)
Binge drinking female (n)	59	34	35
Median days of binge drinking females	15.0	20.0	23.0
(range)	(1-30)	(1-30)	(1-30)

In the past 30 days:	Clinician interviewed (n=148)	Researcher MFU (n=100)	Researcher FFU (n=100)
Heavy drinking (%)	66.4	50.6	63.0
Days of heavy drinking	5.0	5.0	5
(range)	(1-21)	(1-20)	(1-20)
Median number of standard drinks	21.0	23.5	30
(range)	(3-140)	(7-60)	(6-144)

3.4.2 Baseline alcohol dependence

A total Severity of Dependence Scale (SDS) was used to determine the participant's level of dependence to alcohol. The median SDS total score for all participants was 10 out of a possible 15. This score indicates participants have a high dependence to alcohol (Lawrinson et al., 2007). Participants interviewed by researchers were significantly more likely to report higher levels of alcohol dependence (median score=11) than those interviewed by clinicians (median score=9, $z=-2.300$, $p=0.021$). A significant difference between SDS total scores and service type was also found ($x^2=16.719$, $p<0.001$). Participants recruited from detoxification services were more likely to score higher on the SDS than participants from other services types. This indicates that the current sample of detoxification participants had higher levels of alcohol dependency than participants from other service types.

3.4.3 Baseline alcohol craving

The median alcohol craving score for all participants was three out of 10. This indicates that participants expressed a low desire for alcohol at the time of interview. No significant differences in alcohol craving scores were found to exist between participants.

3.5 Baseline drug use

In the 30 days prior to interview, over half of the participants (53.4%) had used an illicit drug at least once. The most commonly used illicit drug in the past month was cannabis (37.9%), with participants using on a median of 14 out of the past 30 days. Just under a quarter of participants (23.3%) had used amphetamines in the past month, using on a median of six days. Female participants reported using amphetamines on significantly more days (n=9) in the past month than male participants (n=4) ($z=-2.293$, $p=0.022$).

Table 4: Baseline "other" drug use

In past 30 days:	Clinician interviewed (n=148)	Researcher MFU (n=100)	Researcher FFU (n=100)
Used tobacco (%)	79.7	89.0	87.0
Median days tobacco use	30.0	30	30
(range)	(2-30)	(4-30)	(3-30)
Median no. cigarettes per day	20.0	20.0	20.0
(range)	(2-50)	(4-60)	(1-60)
Used heroin (%)	7.4	9.0	6.0
Median days heroin use	5.0	2.0	10
(range)	(1-30)	(1-10)	(1-21)
Used opioids (%)	5.4	8	7
Median days opioid use	15.0	15.0	3.0
(range)	(1-30)	(2-30)	(1-10)
Used cannabis (%)	31.1	46.0	40.0
Median days cannabis use	20.0	14.0	12.0
(range)	(1-30)	(1-20)	(1-30)
Used cocaine (%)	10.1	6.0	3.0
Median days of cocaine use	5	3.5	3.0
(range)	(1-20)	(1-10)	(1-3)
Used amphetamines (%)	23.6	24.0	22.0
Median days amphetamines use	5.0	8	7.5
(range)	(1-30)	(1-30)	(1-30)
Used tranquilisers (%)	23.6	18.0	12.0
Median days tranquilisers use	4.0	10	13.5
(range)	(1-30)	(1-30)	(1-30)

Of the participants using cannabis in the past month, those interviewed by clinicians reported using on significantly more days (n=20) than those interviewed by researchers (n=14) (z=-2.058, p=0.040). Of the participants using tranquilisers in the past month, those interviewed by researchers reported using on significantly more days (n=10) than those interviewed by clinicians (n=4) (z=-2.331, p=0.020). Participants from detoxification services reported using tranquilisers on significantly more days in the past month than those from other service types (x^2=8.001, p=0.046).

Approximately 85% of all participants reported using tobacco in the past 30 days, with participants using on a median of 30 days in the month. Male participants reported using tobacco on significantly more days per month (z=-2.706, p=0.007) and smoking significantly more cigarettes per day (z=-1.983, p=0.047) than female participants.

3.5.1 Baseline injecting drug use

Over a third of all participants (34.6%) reported ever injecting a drug in their lifetime, with 17.3% of all participants reporting injecting a drug in the past three months.

Table 5: Baseline injecting drug use

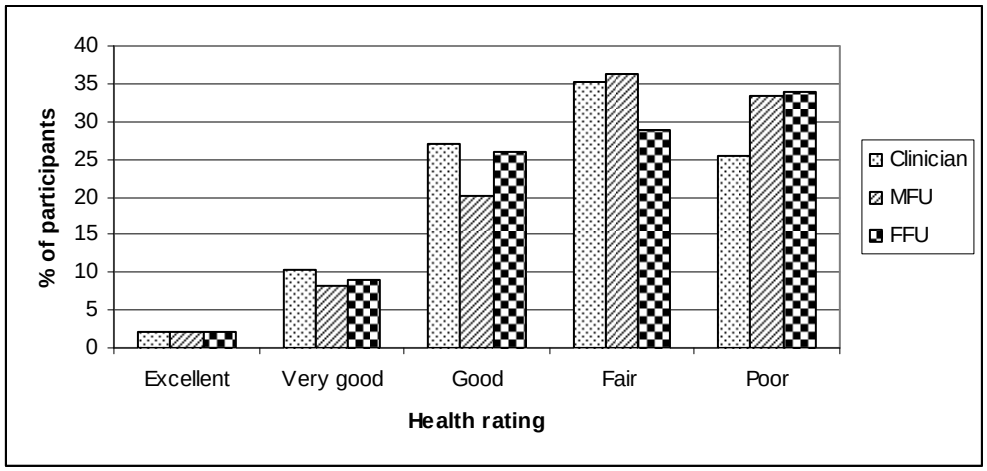
	Clinician Interviewed (n=141)	Researcher MFU (n=100)	Researcher FFU (n=100)
In the last 3 months	14.2	23.0	16.0
More than 3 but less than 12 months ago	7.8	6.0	10.0
12 months ago or more	5.7	11.0	13.0
Never injected	72.3	60.0	61.0

3.6 Baseline health and well-being

3.6.1 Baseline physical health

At baseline, the majority of participants (63.9%) rated their physical health as fair.

Figure 3: Baseline physical health rating



3.6.2 Baseline general well-being

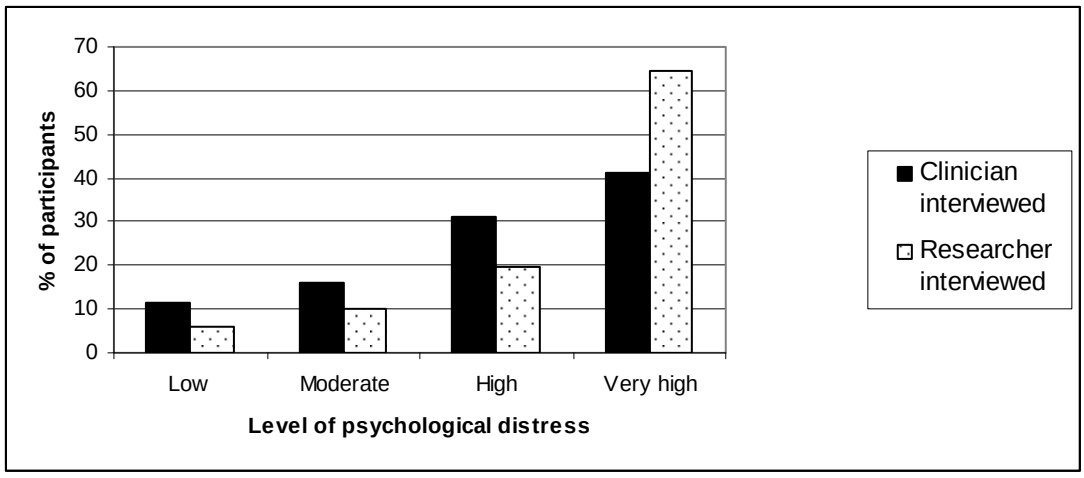
The median well-being score for all participants was five out of 10, where 0 = "my life is really awful right now" to 10 = "my life is really good right now". This indicates that the participants felt their life was quite average at the time of interview (i.e. at the beginning of treatment).

3.6.3 Baseline mental health

The mean Kessler 10 (K10) total score for all participants was 30.3 (SD 9.7, range 10-50). Participants interviewed by researchers scored higher on the K10 (M=32.3, SD=9.5) than those interviewed by clinicians (M=27.6, SD=9.2, t (345)=4.662, $p<0.001$). This indicates a significantly higher level of reported psychological distress among these participants.

A comparison between participants baseline service type and total K10 scores revealed significant differences across the four service types ($F(3, 343)=6.931$, $p<0.001$). A medium effect size was found (eta squared=0.06). Post hoc comparisons using the Tukey HSD test indicated that the mean K10 total score for participants at detoxification services (M=34.6, SD=9.3) was significantly higher than the participants from rehabilitation (M=29.1, SD=9.7) and counselling services (M=26.8, SD=7.9).

Figure 4: Baseline levels of psychological distress



3.6.4 Baseline hospital admission

At the time of the baseline interview, close to half of the participants (44.1%) had required hospital admission for treatment of alcohol-related problems. Participants who have had previous treatment for alcohol use were also significantly more likely to have been previously admitted to hospital for alcohol-related complications ($x^2=8.835$, $p=0.003$).

3.7 Baseline health service utilisation

Close to half of all participants had been in contact with the health service in the three months prior to interview. Forty-two per cent of participants had presented to an accident and emergency department (A&E) on a median of one occasion in the past three months. One-third of all participants (33.6%) had spent at least one night in hospital (median=3 nights). Participants interviewed by clinicians reported spending significantly more nights in hospital (n=5) than those interviewed by researchers (n=2) ($z=-2.548$, $p=0.011$).

Three-quarters of all participants had visited a general practitioner (GP), on a median of 3 days in the past three months. Participants interviewed by researchers reported visiting a GP more regularly (n=3 days) than those interviewed by clinicians (n=2 days) ($z=-2.294$, $p=0.022$). Participants from detoxification services were also more likely to visit a GP than participants from other service types ($x^2=12.792$, $p=0.005$).

Just over two-thirds of participants reported taking prescribed medication in the past three months, with participants interviewed by researchers reporting a significantly higher frequency of use than those interviewed by clinicians ($z=-3.395$, $p<0.001$). Female participants were also more likely to report taking prescribed medication more frequently than male participants ($z=-2.393$, $p=0.017$).

Of those taking prescribed medications in the past three months (n=235), the two most commonly reported were anti-depressants (56.2%) and anti-anxiety medications (27.2%). A further 12.3% of participants reported taking anti-psychotics, 10.2% were taking alcohol medication and 39.1% were taking "other" medications.

Table 6: Baseline health service utilisation

In the past 90 days:	Clinician interviewed (n=148)	Researcher MFU (n=100)	Researcher FFU (n=100)
Visited A&E (%)	37.8	40.0	49.0
Median times visited A&E	1	1	2
(range)	(1-5)	(1-6)	(1-14)
Spent a night in hospital (%)	31.8	30.0	40.0
Median nights spent in hospital	5	3	2
(range)	(1-90)	(1-42)	(1-35)
Visited a GP (%)	62.8	84.0	84.0
Median times visited GP	2	3	3
(range)	(1-16)	(1-90)	(1-20)
Taking medication (%)	64.2	71.0	69.0
Median days taking medication	90	90	90
(range)	(1-90)	(1-90)	(1-90)

3.8 Baseline goals and confidence in treatment

3.8.1 Baseline treatment goals and confidence in treatment

The majority of participants (73.8%) reported they wanted to achieve "complete abstinence from alcohol" as a result of their current treatment episode. At the time of the baseline interview, over two-thirds of the participants were more then 70% confident of achieving their goal (median=8 out of 10, range 0-10).

Table 7: Baseline goals of treatment (%)

	Clinician interviewed (n=198)	Researcher MFU (n=99)	Researcher FFU (n=99)
Complete abstinence from alcohol	71.7	70.7	76.8
A break from alcohol use	6.2	2.0	4.0
A reduction in alcohol use	4.1	3.0	4.0
Control over alcohol use	15.9	1.0	0.0
No change	2.1	23.2	15.2

3.8.2 Baseline situational treatment confidence

Participants were overall less confident in achieving and maintaining their treatment goal three months into the future. Participants rated their future confidence of achieving and maintaining their treatment goal when facing negative emotional states as six (median) out of 10 (range 0-10), with just under half of the participants (46.8%) reporting they were more than 70% confident. Participants reported feeling slightly more confident about achieving and maintaining their treatment goal when faced with social situations (median=7, range=0-10), with 54.3% of participants reporting they were more than 70% confident.

3.9 Follow-up sample: Demographics and differences

This section provides an outline of the participants who were re-interviewed at the three and 12 month follow-up time-points by both clinicians and researchers. It will also describe any demographic differences that may exist between the clinician and researcher groups and any demographic differences between those successfully followed-up versus those lost to follow-up. As Table 8 illustrates, researchers were able to successfully follow up a greater proportion of participants than clinicians at both three and 12 months.

Table 8: Follow-up rates (%)

Follow-up interval	Clinician interviewed (n=148)	Researcher interviewed (n=200)	
		MFU (n=100)	FFU (n=100)
3 month	49.3	N/A	67.0
6 month	N/A	N/A	63.0
9 month	N/A	N/A	55.0
12 month	29.7	54.0	63.0

3.9.1 Three-month sample

Participants re-interviewed at three months (n=140) did not differ significantly from those loss to follow-up in terms of age, gender, demographics, previous treatment history, health and extent of alcohol use. This indicates that the three-month sample is representative of the initial baseline sample. Researchers were, however, significantly more likely to have conducted a three-month follow-up interview with participants than clinicians (x^2=7.322, p=0.007). The baseline service type of those re-interviewed at three months is presented below (Table 9).

Table 9: Baseline service type of three month follow-up group

Service type (%)	Clinician interviewed (n=73)	Researcher interviewed (n=67)	All participants (n=140)
Residential rehabilitation (RR)	67.1	52.2	60.0
Therapeutic community (TC)	13.7	17.9	15.7
Counselling (C)	19.2	3.0	11.4
Detoxification (D)	0.0	26.9	12.9

Participants re-interviewed by researchers at three months (FFU group) scored significantly higher on the SDS at baseline (median=11) than participants who were lost to follow-up (median=9) (z=-2.025, p=0.043). Participants re-interviewed by researchers at three months were also significantly more likely to have higher baseline K10 total scores (z=-3.717, p<0.001) and higher SDS total scores (z=-2.677, p=0.007) than participants re-interviewed

by clinicians at three months. Researchers were also more likely to have re-interviewed participants whose main source of income was employment at baseline than participants interviewed by clinicians (x^2=5.239, p=0.022).

3.9.2 Twelve-month sample

The baseline service type of those re-interviewed at 12 months is presented below (Table 10).

Table 10: Baseline service type of 12-month follow-up group

Service type (%)	Clinician interviewed (n=44)	Researcher MFU (n=54)	Researcher FFU (n=63)
Residential rehabilitation (RR)	90.9	57.4	50.8
Therapeutic community (TC)	9.1	5.6	12.7
Counselling (C)	0.0	0	3.2
Detoxification (D)	0.0	37.0	33.3

Participants reinterviewed at 12 months by clinicians (n=44) did not differ significantly from the initial baseline sample in terms of age, gender, accommodation, previous treatment history, health or extent of alcohol use. However, those lost to follow-up were more likely to have been working full time at baseline (x^2=4.088, p=0.043) and living with their parents (x^2=12.428, p<0.001) than those successfully followed up.

Participants re-interviewed at 12 months in the MFU group (n=54) also did not differ significantly from the initial baseline sample in terms of age, gender, employment, previous treatment, health or extent of alcohol use. However, participants who lived in privately owned accommodation at baseline were significantly more likely to have been successfully followed-up at 12 months (x^2=12.288, p<0.001) than those who lived in rented accommodation than at baseline. This suggests that, overall, the MFU group re-interviewed at 12 months was representative of the original baseline MFU group sample.

Participants re-interviewed at 12 months in the FFU group (n=63) did not differ significantly from the initial baseline sample in terms of age, gender, demographics, previous treatment history, health or extent of alcohol use. This suggests, overall, that the FFU group re-interviewed at 12 months was representative of the original baseline FFU group sample

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3.10 Treatment retention and experiences over time

Table 11 shows the percentage of participants still involved in their baseline treatment episode at the time of their follow-up interview (percentages are calculated as a proportion of those who were successfully followed up at each time point). Clinicians were more likely to interview participants still in baseline treatment at three-month follow-up than those interviewed by researchers (x^2=6.308, p<0.012). This difference can be related to a number of factors, one of which can be seen as the time and effort required to follow-up clients who have left treatment.

Table 11: Baseline treatment retention

	3 months	6 months	9 months	12 months
Clinician interviewed	45.8	N/A	N/A	11.4
Researcher MFU	N/A	N/A	N/A	3.8
Researcher FFU	25.4	6.3	1.8	3.2

As is expected, the majority of participants still participating in their baseline treatment episode at three months come from residential rehabilitation programs (Table 12). Generally, detoxification programs are a maximum of 10 days in duration with some residential rehabilitation and therapeutic community programs lasting up to one year in length.

Table 12: Baseline service type of those in treatment at three months

	Clinician interviewed (n=33)	Researcher interviewed (n=17)
Residential rehabilitation	54.5	47.1
Therapeutic communities	27.3	47.1
Counselling	18.2	5.8
Detoxification	0.0	0.0

At the three-month interview, the primary reason participants gave for leaving their baseline treatment episode was their "treatment was completed" (Clinician (C)=47.5% vs Researcher (R)=58.0%). This was followed by participants leaving "because they wanted to" (i.e. left against the advice of the treatment provider, or left without giving the treatment provider any notice) (C=12.5% vs R=28.0%).

The majority of participants who had left treatment at three months also reported being referred to another treatment type (C=75.0% vs R=84.0%). Such a referral could have included aftercare, counselling and community groups such as Alcoholics Anonymous (AA) amongst other treatment programs.

Table 13 shows the percentage of participants involved in treatment for at least one day in the three months prior to the follow-up period (i.e. three, six, nine or 12). Counselling was the most common treatment participants took part in following separation from their baseline treatment type.

Table 13: Treatment involvement over time (including baseline treatment) in the three months prior to follow-up period*

	Clinician interviewed	Researcher MFU	Researcher FFU
3 month (%)	(n=71)		(n=67)
Residential rehabilitation	40.8	N/A	25.4
Therapeutic community	18.3	N/A	13.4
Counselling	42.3	N/A	25.4
Detoxification	5.6	N/A	3.0
Other	33.8	N/A	13.4
6 month (%)			(n=62)
Residential rehabilitation	N/A	N/A	11.3
Therapeutic community	N/A	N/A	6.5
Counselling	N/A	N/A	32.3
Detoxification	N/A	N/A	14.5
Other	N/A	N/A	22.6
9 month (%)			(n=54)
Residential rehabilitation	N/A	N/A	11.1
Therapeutic community	N/A	N/A	5.6
Counselling	N/A	N/A	33.3
Detoxification	N/A	N/A	11.1
Other	N/A	N/A	22.2
12 month (%)	(n=44)	(n=54)	(n=63)
Residential rehabilitation	29.5	11.1	9.5
Therapeutic community	11.4	0.0	1.6
Counselling	31.8	33.3	27.0
Detoxification	4.5	16.7	11.1
Other	9.1	24.1	19.0

* Please note, participants may have been involved in more than one treatment, i.e. numbers do not add up to 100%.

4.0 RESULTS: PART TWO

Did each client group demonstrate significant improvement in treatment outcome over time from baseline to three months and baseline to 12 months?

This section of the results is presented in two parts. To establish whether changes in AATOM-C scales and scores occurred over time, data from baseline to three months and baseline to 12 months is analysed. Only those successfully followed up are included in the analysis.

4.1 Changes in treatment outcome: Baseline to three months

4.1.1 Alcohol use and dependence: Baseline to three months

A significant reduction in past-month alcohol use was found for participants interviewed by both researchers and clinicians at three months. The number of participants who reported drinking in the past month at baseline (n=206) decreased by 34% to n=70 at three-month follow-up.

Abstinence from alcohol in the 30 days prior to interview increased greatly among both groups of participants from baseline to three months. At baseline, 13.7% of participants interviewed by clinicians reported they had not consumed alcohol in the past month; at three-month follow-up, abstinence rates increased to 43.8%. Of those interviewed by researchers, 17.9% of participants reported they had not consumed alcohol in the past month; at three-month follow-up, abstinence rates increased to 56.7%.

Of all participants interviewed by clinicians at follow-up, significant reductions from baseline to three-month follow-up were reported for days of use ($z=-6.435$, $p<0.001$), number of drinks ($z=-5.183$, $p<0.001$), days of heavy drinking ($z=-5.345$, $p<0.001$) and number of drinks consumed on heavy drinking days ($z=-3.042$, $p=0.002$).

Similar reductions were observed for participants interviewed by researchers at follow-up: days of drinking ($z=-5.150$, $p<0.001$), number of drinks ($z=-5.611$, $p<0.001$), days of heavy drinking ($z=-4.278$, $p<0.001$) and number of drinks consumed on heavy drinking days ($z=-4.141$, $p<0.001$).

Table 14: Alcohol use: Baseline to three months

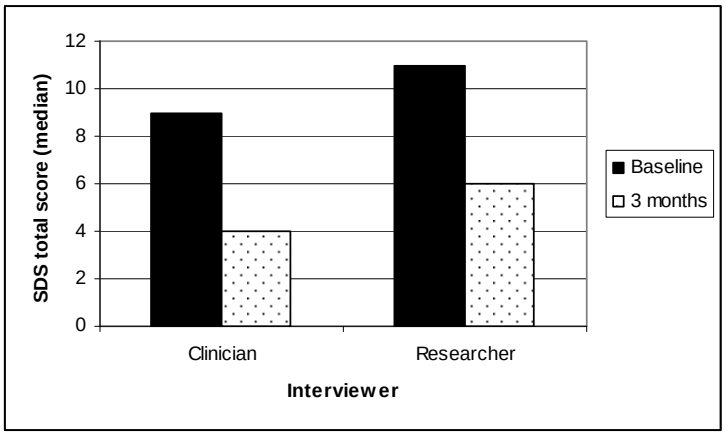
In the past 30 days:	Clinician interviewed (n=73)		Researcher interviewed (n=63)	
	Baseline	3 months	Baseline	3 months
Drinking alcohol (%)	86.3	56.2	82.1	43.3
Median days of drinking	22.0	5.0	23.0	10.0
(range)	(1-30)	(1-30)	(2-30)	(1-30)
Median number of standard drinks	14.0	5.0	20.0	6.0
(range)	(1-66)	(1-40)	(3-58)	(1-36)
Binge drinking males (n)	30	11	27	10
Median days binge drinking males	23.0	8.0	23.0	17.5
(range)	(1-30)	(2-30)	(2-30)	(2-30)
Binge drinking females (n)	32	12	27	8
Median days binge drinking females	14.5	4.0	24	8.5
(range)	(1-30)	(2-25)	(2-30)	(2-30)
Heavy drinking (%)	56.2	28.8	58.2	22.2
Median number of standard drinks heavy	20.0	7.0	30.0	17.5
drinking (range)	(4-45)	(2-25)	(10-80)	(7-99)
Median days of heavy drinking	7.0	4.0	5.0	2.0
(range)	(1-20)	(1-27)	(1-20)	(1-16)

* Median days and drinks calculated only for those drinking at each time point.

4.1.1.1 Alcohol dependence: Baseline to three months

Significant decreases in alcohol dependence (total SDS scores) were observed for both clinician-interviewed ($z=-6.257$, $p<0.001$) and researcher-interviewed participants ($z=-5.695$, $p<0.001$) from baseline to three months.

Figure 5: Alcohol dependence: Baseline to three months



* Clinician n=71
* Researcher n=67

4.1.1.2 Alcohol craving: Baseline to three months

Participants interviewed by both researchers and clinicians expressed a decreased desire for alcohol at three months. Clinician-interviewed participants reported a significant decrease in

desire for alcohol from baseline (3) to three months (1) ($z=-3.281$, $p<0.001$), where 0 = no desire for alcohol and 10 = an uncontrollable desire for alcohol. Researcher-interviewed participants also reported a decrease in their desire for alcohol from baseline (median=3) to three months (median=1.5); however, this was not statistically significant.

4.1.2 "Other" drug use: Baseline to three months

A decrease in the number of participants using "other" drugs from baseline to three-month follow-up was observed across all drug categories for both clinician and researcher-interviewed participants (Table 15). The largest decrease in drug use was amongst the researcher-interviewed participants using cannabis, the number of participants using cannabis in the past month decreased by 25.4% from baseline to follow-up. The use of tranquilisers among participants interviewed by clinicians also decreased greatly, by 19.2% from baseline to follow-up. This figure, however, needs to be interpreted with caution as it is believed that medical use of tranquilisers may have also been recorded by clinicians at baseline interview in addition to illicit use.

Table 15: "Other" drug use: Baseline to three months

In the past 30 days:	Clinician-interviewed (n=73)		Researcher-interviewed (n=67)	
	Baseline	3 months	Baseline	3 months
Used tobacco (%)	74.0	72.6	83.6	83.6
Median days tobacco	30.0	30.0	30.0	30.0
(range)	(2-50)	(8-30)	(3-30)	(7-30)
Median no. of cigarettes	20.0	15.0	20.0	15.0
(range)	(2-50)	(2-60)	(1-60)	(2-40)
Used heroin (%)	5.5	2.7	4.5	1.5
Median heroin days	5.0#	4.5#	4.0#	9.0#
(range)	(2-30)	(1-8)	(6-21)	(N/A)
Used opioids (%)	5.5	6.8	6.0	0.0
Median opioid days	15.0#	4.0#	6.0#	0.0#
(range)	(7-30)	(2-20)	(1-10)	(N/A)
Used cannabis (%)	20.5	13.7	43.3	17.9
Median cannabis days	20.0	10.0	14.0	11.0
(range)	(1-30)	(2-30)	(1-30)	(1-30)
Used cocaine (%)	9.6	5.5	4.5	1.5
Median cocaine days	5.0#	4.0#	3.0#	1.0
(range)	(1-20)	(1-10)	(1-3)	(N/A)
Used amphetamines (%)	23.3	9.6	19.4	9.0
Amphetamines	5.0	10.0#	7.5	2.5#
(range)	(1-20)	(1-20)	(1-23)	(1-7)
Used tranquilisers (%)	28.8	9.6	13.4	1.5
Median days tranquilisers	4.0	3.0#	10.0#	5.0#
(range)	(1-30)	(1-30)	(1-30)	(N/A)

* Days of use includes only participants using each drug category at each time point.

Interpret with caution, small numbers n<10.

Of all participants interviewed by researchers at follow-up (n=67), significant decreases in "other" drug use days (in the past month) from baseline to three months were reported for cannabis (z=-2.700, p=0.044), amphetamines (z=-2.666, p=0.008), tranquilisers (z=-2.668, p=0.008) and the number of cigarettes smoked per day (z=-2.015, p=0.044).

Of all participants interviewed by clinicians at follow-up (n=73), significant decreases in "other" drug use days (in the past month) from baseline to three months were reported for cannabis (z=-2.301, p=0.021), tranquilisers (z=-2.763, p=0.006) and the number of cigarettes smoked per day (z=-2.986, p=0.003).

4.1.2.1 Injecting drug use: Baseline to three months

The proportion of participants who reported recent injecting decreased for both participants interviewed by clinicians and researchers from baseline to three months. However, no statistically significant differences were observed.

Table 16: Injecting drug use: Baseline to three months (%)

	Clinician interviewed (n=73)		Researcher interviewed (n=67)	
	Baseline	3 months	Baseline	3 months
In the last 3 months	8.2	6.8	13.4	7.5
More than 3 but less than 12 months ago	8.2	11.0	9.0	11.9
12 months ago or more	5.5	6.8	10.4	13.4
Never injected	71.2	71.2	67.2	65.7
Not stated	6.8	4.1	0.0	1.5

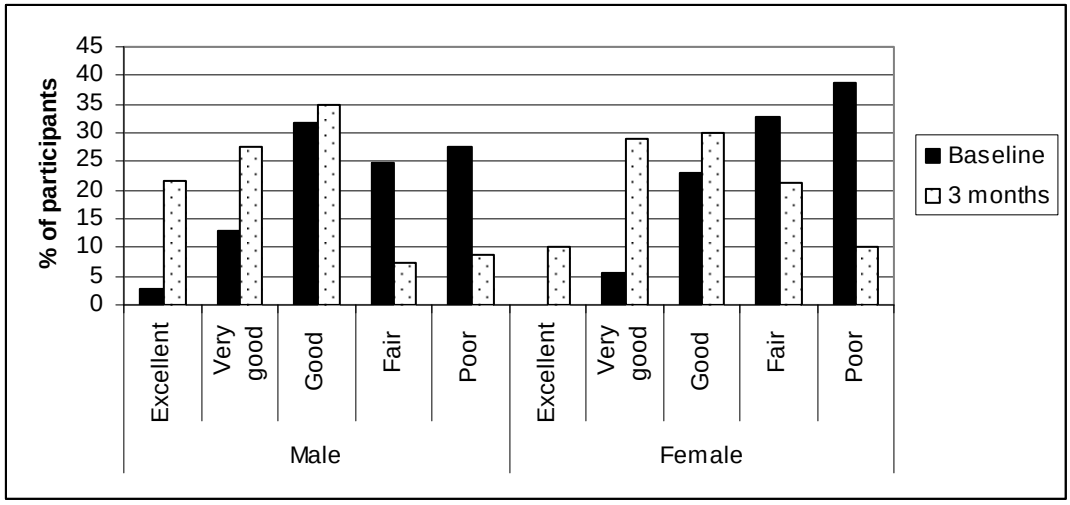
4.1.3 Health and well-being: Baseline to three months

4.1.3.1 Physical health: Baseline to three months

Participants re-interviewed at three months reported a vast improvement in their physical health. At baseline, the majority of participants indicated their health was fair to poor; at three months, the majority of participants reported their health to be very good to good. Participants interviewed by clinicians reported greater health improvements than those interviewed by researchers.

Figure 6 below depicts the change in health rating over time for both males and females. Females were more likely to report poorer health at both time points.

Figure 6: Physical health rating: Baseline to three months (n=140)



4.1.3.2 General well-being

Participant's interviewed by both researchers and clinicians at three-month follow-up reported significant improvements in their general well-being. Self-reported well-being ratings for clinician interviewed participants increased from a five to seven out of 10 at three months ($z=-4.739$, $p<0.001$). Self-reported well-being ratings for researcher interviewed participants increased from a four to seven out of 10 at three months ($z=-5.295$, $p<0.001$).

4.1.3.3 Mental health

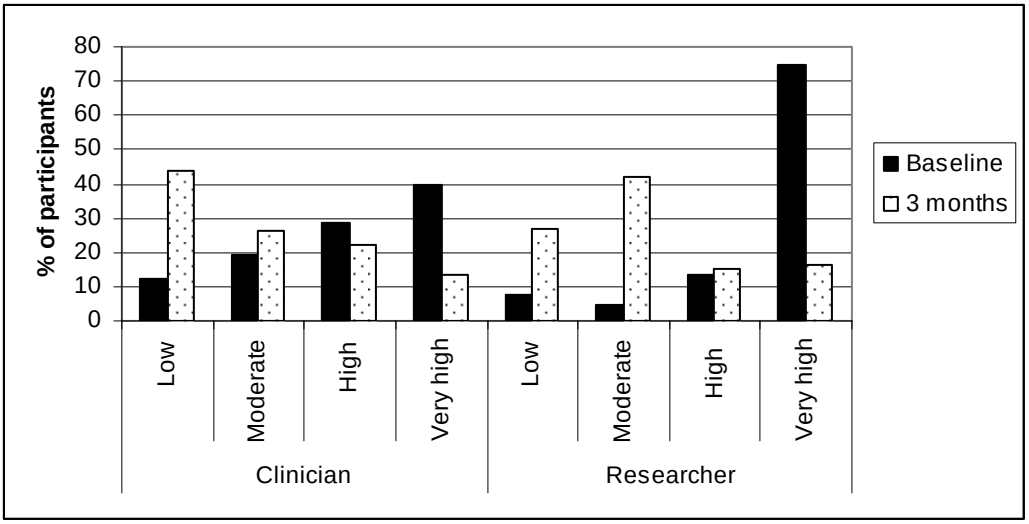
There was a statistically significant decrease in mean K10 total scores from baseline to three months for both participants interviewed by clinicians ($t(72)=7.599$, $p<0.001$) and researchers ($t(66)=10.417$, $p<0.001$) (Table 17). This indicates a reduction in psychological distress levels amongst the participants interviewed at follow-up.

Table 17: Changes in K10 total scores: Baseline to three months

	Baseline mean (SD) Range	3 months mean (SD) range
Clinician interviewed (n=73)	27.7 (9.5) (11-47)	19.6 (8.7) (10-42)
Researcher interviewed (n=73)	34.0 (9.6) (13-47)	20.4 (7.7) (10-40)

Figure 7 below illustrates the change in psychological distress levels for participants over time. K10 cut-offs were taken from the National Health Survey 2004-05 (ABS, 2006).

Figure 7: Level of psychological distress: Baseline to three months



***** Clinician n=73, Researcher n=67

4.1.4 Health service utilisation: Baseline to three months

The number of participants accessing health services in the 90 days prior to interview decreased substantially at three-month follow-up.

Of all participants interviewed by researchers at follow-up (n=67), significant decreases were reported for the number of: times accessed the A&E department (z=-3.072, p=0.002); nights spent in hospital (z=3.273, p<0.001); and times visited a GP (z=-2.453, p=0.014).

Of all participants interviewed by clinicians at follow-up (n=73), a significant decrease was observed in the number of times accessed the A&E department (z=-2.944, p=0.003). Caution must also be taken when looking at the number of nights spent in hospital for participants interviewed by clinicians because the participant's current hospital treatment episode for alcohol use may have been included for some residential rehabilitation services.

Table 18: Health service utilisation: Baseline to three months[*]

In the past 90 days:	Clinician interviewed (n=73)		Researcher interviewed (n=67)	
	Baseline	3 months	Baseline	3 months
Visited A & E (%)	35.6	15.1	47.8	17.9
Median times visited A & E (range)	1.0 (1-3)	1.0 (1-2)	1.0 (1-5)	1.0 (1-14)
Spent a night in hospital (%)	41.1	16.4	32.9	9.0
Median nights spent in hospital (range)	5.0 (1-90)	5.0 (1-84)	2.0 (1-35)	2.0[#] (1-5)

In the past 90 days	Clinician interviewed (n=73)		Researcher interviewed (n=67)	
	Baseline	3 months	Baseline	3 months
Visited a GP (%)	64.4	64.4	88.1	68.7
Median times visited GP	3.0	3.0	3.0	3.0
(range)	(1-16)	(1-24)	(1-12)	(1-24)
Taking medication (%)	60.3	57.5	73.1	70.1
Median days taking medication	90.0	90.0	90.0	90.0
(range)	(2-90)	(2-90)	(3-90)	(3-90)

* Median days of use includes only participants who utilised each service at each time point.
# Interpret with caution, small numbers n<10.

4.1.4.1 Hospital admission

No new hospital admissions for the treatment of alcohol-related complications were reported by the participants followed up at three months. However, confusion around the wording and timeframe of the question may have influenced fewer participants to report "ever" being admitted to hospital for an alcohol-related complication.

4.1.5 Goals and confidence in treatment: Baseline to three months

4.1.5.1 Goals and confidence in treatment

At both baseline and three-month time points, the majority of participants from each group reported they wanted to achieve "complete abstinence from alcohol". Participants' confidence of achieving and maintaining their treatment goal remained stable for the clinician interviewed participants; however, participants interviewed by researchers were significantly less confident in their ability to achieve their treatment goal at three months (median 7 out of 10) than at baseline (median 8) ($z=-3.077$, $p=0.002$).

Table 19: Treatment goals: Baseline to three months

	Clinician interviewed (n=71)		Researcher (n=66)	
	Baseline	3 months	Baseline	3 months
Complete abstinence	73.3	56.9	78.8	65.4
A break from alcohol use	5.6	2.8	1.5	1.5
A reduction in use	2.8	6.9	6.1	14.9
Control over use	15.5	22.2	13.6	18.2
No change	2.8	11.2	0.0	0.0

4.1.5.1 Situational confidence in treatment

Participants' confidence of achieving and maintaining their treatment goal three months into the future changed with time from baseline to three-month follow-up; however, no statistically significant differences were observed.

Participants interviewed by clinicians were slightly less confident that they would achieve and maintain their goal when facing negative emotional states at three months (median 6 out of 10) than at baseline (median=7); however, confidence of achieving and maintaining their goal when faced with social situations remained stable over time (median=7).

Participants interviewed by researchers, however, reported increased confidence of achieving and maintaining their treatment goals over time when facing both negative emotional states (baseline median=6, follow-up=8 out of 10) and social situations (baseline=6.5, follow-up=7 out of 10).

SUMMARY

Both client groups demonstrated significant improvement in treatment outcomes from baseline to three months.

Alcohol use

- Significant reductions in days of alcohol use and number of drinks consumed per day for both the clinician and researcher interviewed groups from baseline to three months were reported.
- Both client groups indicated significant reductions in alcohol dependence at three months.
- Significant reductions in alcohol craving from baseline to three months were expressed by participants interviewed by clinicians.

Other drug use

- Both client groups reported smoking significantly less cigarettes per day at three months.
- Participants interviewed by clinicians reported significant decreases in days of use from baseline to three months for both cannabis and tranquilisers.
- Participants interviewed by researchers reported significant decreases in days of use for cannabis, tranquilisers and amphetamines at three months.

Health

- Significant improvements in physical health, general well-being and mental health from baseline to three months were reported for both client groups.

Health service utilisation

- Participants interviewed by clinicians reported a significant reduction in the number of times they accessed the A & E department from baseline to three months.
- Participants interviewed by researchers reported significant reductions in the number of times they accessed the A & E department, number of nights spent in hospital and times visited a GP.

4.2 Changes in treatment outcome: Baseline to 12 months

4.2.1 Alcohol use and dependence: Baseline to 12 months

A significant reduction in past month alcohol use was found for all participants re-interviewed at 12 months (by both clinicians and researchers).

Abstinence from alcohol in the 30 days prior to interview increased greatly among both groups of participants from baseline to 12 months. At baseline, 15.9% of participants interviewed by clinicians reported they had not consumed alcohol in the past month; at 12 month follow-up, abstinence rates increased to 34.1%. Just fewer than 10% of participants in the MFU group (9.3%) reported they had not consumed alcohol in the past month; however, at 12-month follow-up, abstinence rates increased to 40.7%. In the FFU group, 11.1% of participants reported they had not consumed alcohol in the past month; at 12 months, abstinence rates increased to 33.3%.

The number of participants who reported drinking at baseline (n=143) decreased by 28% to n=103 at 12-month follow-up. At 12 months, participants overall reported drinking on significantly less days ($z=-6.916$, $p<0.001$) and drinking a significantly smaller number of drinks per day ($z=-9.025$, $p<0.001$).

Table 20: Alcohol use: Baseline to 12 months

In the past 30 days:	Clinician interviewed (n=44)		Researcher MFU (n=54)		Researcher FFU (n=63)	
	Baseline	12 months	Baseline	12 months	Baseline	12 months
Drinking alcohol (%)	84.1	65.9	90.7	59.3	88.9	66.7
Median days of drinking (range)	20.5 (1-30)	10.0 (2-30)	23.0 (1-30)	8.0 (1-30)	23.5 (2-30)	20.0 (1-30)
Median number of standard drinks (range)	15.0 (1-44)	6.0 (1-22)	19.5 (3-73)	9.0 (2-38)	20.0 (3-58)	9.0 (2-27)
Binge drinking – males (n)	23	13	24	17	28	18
Median days binge drinking males (range)	21.0 (1-30)	5.0 (1-30)	23.5 (1-30)	11.0 (1-30)	26.0 (3-30)	20.0 (1-30)
Binge drinking – females (n)	15	4	21	9	26	18
Median days binge drinking females (range)	18.0 (2-30)	15.0[#] (N/A)	23.0 (1-28)	0.0 (N/A)	23.0 (2-30)	0.0 (N/A)
Heavy drinking (%)	59.1	31.8	55.6	31.5	55.6	38.1
Median heavy drinking days (range)	7.5 (1-20)	2.5 (1-10)	5.0 (1-20)	4.0 (1-20)	5.0 (1-20)	2.5 (1-16)
Median number of standard drinks (range)	20.0 (6-48)	13.5 (2-36)	30.0 (10-60)	21.0 (6-60)	30.0 (10-80)	20.0 (4-40)

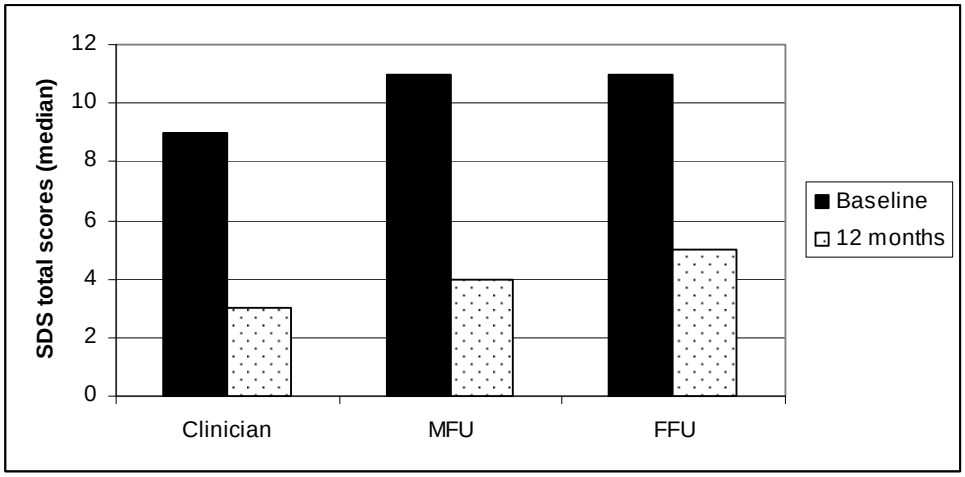
* Median days and drinks calculated only for those drinking at each time point.

[#] Interpret with caution, small numbers n<10.

4.2.1.1 Alcohol dependence: Baseline to 12 months

Significant decreases in alcohol dependence (total SDS scores) were observed for both clinician interviewed ($z=-4.294$, $p<0.001$), the researcher MFU group ($z=-5.335$, $p<0.001$) and the researcher FFU group ($z=-5.202$, $p<0.001$) from baseline to 12 months.

Figure 8: Alcohol dependence: Baseline to 12 months



* Clinician n=41.
* Researcher MFU n=53.
* Researcher FFU n=63.

4.2.1.2 Alcohol craving: Baseline to 12 months

Alcohol craving scores remained relatively stable from baseline to 12 months for those interviewed at the 12-month follow-up point. No significant changes in scores (out of 10) were found.

Table 21: Alcohol craving: Baseline to 12 months

	Clinician interviewed (n=44)	Researcher MFU (n=54)	Researcher FFU (n=63)
Median baseline score	3.0	2.5	3.0
(range)	(0-10)	(0-10)	(0-10)
Median 12 months score	3.0	2.0	2.0
(range)	(0-8)	(0-10)	(0-10)

4.2.2 "Other" drug use: Baseline to 12 months

A decrease in the number of participants using "other" drugs from baseline to 12-month follow-up was observed across all drug categories for both clinician and researcher interviewed participants (Table 22). The exception to this was the number of participants using opioids in the researcher MFU group which seemed to increase over time. This increase, however, involves a very small number of participants. The use of cannabis amongst both the researcher MFU and FFU group decreased largely from baseline to follow-up (14.8% and 19.1%, respectively). The reported use of tranquilisers among

participants interviewed by clinicians decreased by 25%; however, this figure needs to be interpreted with caution since it is believed that medical use of tranquilisers may have also been recorded by clinicians at baseline interview in addition to illicit use.

Table 22: "Other" drug use: Baseline to 12 months*

	Clinician interviewed (n=44)		Researcher MFU (n=54)		Researcher FFU (n=63)	
	Baseline	12 months	Baseline	12 months	Baseline	12 months
Tobacco use (%)	81.8	75.0	81.5	77.8	87.3	79.4
Median days of tobacco use (range)	30 (10-30)	30.0 (20-30)	30 (4-30)	30.0 (3-30)	30 (3-30)	30.0 (6-30)
Median number cigarettes (range)	20 (2-50)	15 (5-30)	20 (6-60)	17 (3-45)	20 (1-60)	17 (2-60)
Heroin use (%)	9.1	2.3	9.3	0.0	3.2	3.2
Median days of heroin use (range)	4.5# (2-30)	8.0# (N/A)	2.0# (1-10)	0.0 (N/A)	10.5# (6-15)	8.0# (1-30)
Opioids (%)	4.5	2.3	9.1	11.1	7.9	1.6
Median days of opioid use (range)	6.0# (2-10)	5.0# (N/A)	13# (2-30)	7.0# (4-30)	2.0# (1-10)	7.0# (N/A)
Cannabis (%)	31.8	25.0	46.3	31.5	39.7	20.6
Median days of cannabis use (range)	30 (1-30)	20.0 (6-30)	8 (1-30)	12.0 (2-30)	12 (1-30)	10.0 (1-30)
Cocaine use (%)	11.4	9.1	3.7	1.9	3.2	1.6
Median days of cocaine use (range)	5.0# (1-15)	5.0# (2-10)	6.0# (2-10)	3.0# (N/A)	3.0# (N/A)	4.0# (N/A)
Amphetamines use (%)	31.8	13.6	24.1	11.1	20.6	6.3
Median days of amphetamine (range)	5.5 (1-20)	5.5# (1-15)	5.0 (1-28)	8.5# (1-28)	6.0 (1-30)	3.5# (1-6)
Tranquilisers (%)	29.5	4.5	20.4	7.4	12.7	7.9
Median days of tranquiliser use (range)	4.0 (1-30)	6.0# (1-11)	6.0 (1-30)	6.5# (3-15)	14.5 (1-30)	2.0# (1-5)

* Days of use includes only participants using each drug category at each time point.
# Interpret with caution, small numbers n<10.

Of all participants interviewed by researchers in the MFU group at follow-up (n=54), significant decreases in "other" drug use days (in the past month) from baseline to 12 months were reported for days of heroin use ($z=-2.032$, $p=0.042$) and the number of cigarettes smoked per day ($z=-2.032$, $p<0.001$).

Of all participants interviewed by researchers in the FFU group at follow-up (n=63), significant decreases in "other" drug use days (in the past month) from baseline to 12 months were reported for days of amphetamine use ($z=-3.147$, $p<0.002$) and the number of cigarettes smoked per day ($z=-1.965$, $p=0.049$).

Of all participants interviewed by clinicians at follow-up (n=44), significant decreases in "other" drug use days (in the past month) from baseline to 12 months were reported for days of amphetamine use (z=-2.791, p=0.005), days of tranquiliser use (z=-2.696, p=0.007) and the number of cigarettes smoked per day (z=-2.463, p=0.014).

4.2.2.1 Injecting drug use: Baseline to 12 months

The proportion of participants who reported recent injecting decreased for both participants interviewed by clinicians and researchers from baseline to 12 months. No statistically significant differences were observed.

Table 23: Injecting drug use: Baseline to 12 months

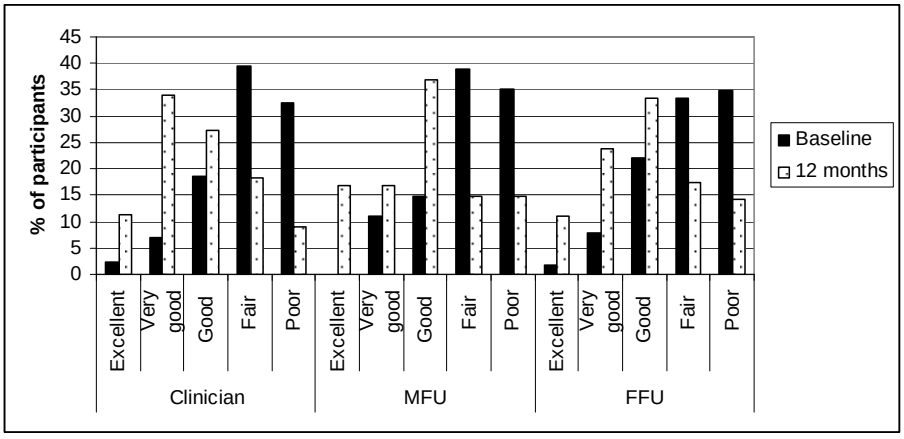
	Clinician interviewed (n=44)		Researcher MFU (n=54)		Researcher FFU (n=63)	
	Baseline	12 months	Baseline	12 months	Baseline	12 months
In the last 3 months	6.8	4.5	20.4	11.1	12.7	6.3
More than 3 but less than 12 months ago	2.3	9.1	3.7	9.3	4.8	7.9
12 months ago or more	0.0	4.5	11.1	13.0	11.1	15.9
Never injected	81.8	72.7	64.8	63.0	71.4	66.7
Not stated	9.1	9.1	0.0	3.7	0.0	3.2

4.2.3 Health and well-being: Baseline to 12 months

4.2.3.1 Physical health: Baseline to 12 months

Participants re-interviewed at 12 months reported significant improvement in their physical health. At baseline, the majority of participants reported their health to be fair to poor; at 12-month follow-up the majority of participants reported their health to be very good to good.

Figure 9: Physical health: Baseline to 12 months



* Clinician n=43.
* MFU n=54., FFU n=63

4.2.3.2 General well-being: Baseline to 12 months

Participants from all three groups reported significant improvements in their general well-being. Self-reported well-being ratings for clinician interviewed participants increased from five to 6.5 out of 10 at 12 months ($z=-2.131$, $p=0.033$). Self-reported well-being ratings for participants in the MFU group increased from five to seven out of 10 at 12 months ($z=-3.543$, $p<0.001$) and general well-being scores for those in the FFU group increased from four to seven at 12-month follow-up ($z=-3.993$, $p<0.001$).

4.2.3.3 Mental health: Baseline to 12 months

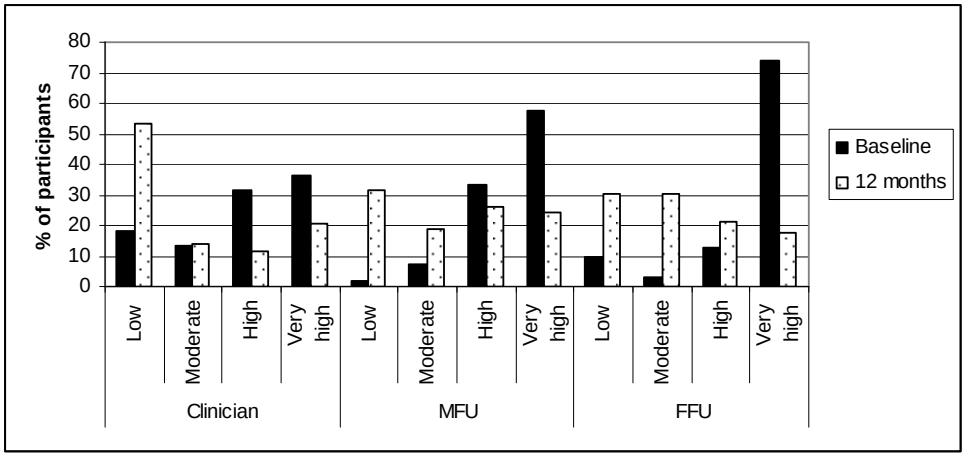
There was a statistically significant decrease in mean K10 total scores from baseline to 12 months for all participant groups (Table 24). This indicates that levels of psychological distress among the groups had decreased over time from baseline to follow-up.

Table 24: Changes in K10 total scores: Baseline to 12 months

	Baseline mean (SD) range	12 months mean (SD) range	Significance
Clinician interviewed (n=43)	26.9 (10.1) 10-47	19.1 (9.6) 10-42	t(42)=3.984, p<0.001
Researcher MFU (n=54)	31.4 (7.6) 15-45	22.4 (9.1) 10-44	t(53)=6.620, p<0.001
Researcher FFU (n=63)	33.8 (9.9) 11-50	21.4 (9.6) 10-50	t(60)=7.789, p<0.001

The figure below illustrates the change in psychological distress levels among the participants over time (K10 cut-offs taken from the National Health Survey 2004-05).

Figure 10: Level of psychological distress: Baseline to 12 months



* Clinician n=43.
* Researcher MFU n=54.
* Researcher FFU n=62.

4.2.4 Health service utilisation: Baseline to 12 months

The number of participants accessing health services in the 90 days prior to interview decreased substantially at 12-month follow-up.

Of all the participants interviewed by clinicians at follow-up (n=44), significant decreases were reported for the number of times participants accessed the A&E department (z=-1.722, p=0.085); nights spent in hospital (z=-2.286, p=0.022) and times visited a GP.

Of all the participants interviewed by researchers in the MFU group at follow-up (n=54), significant decreases were reported for the number of times participants accessed the A&E department (z=-2.326, p=0.020) and the times visited a GP (z=-2.178, p=0.029).

Of all the participants interviewed by researchers in the FFU group at follow-up (n=63), significant decreases were reported for the number of times participants accessed the A&E department (z=-4.304, p<0.001); nights spent in hospital (z=-1.952, p=0.051); and times visited a GP (z=-2.051, p=0.040).

Table 25: Health service utilization: Baseline to 12 months

In the past 90 days:	Clinician interviewed (n=44)		Researcher MFU (n=54)		Researcher FFU (n=63)	
	Baseline	12 months	Baseline	12 months	Baseline	12 months
Visited A & E (%)	25.0	15.9	46.3	24.1	49.2	19.0
Median times visited A & E	2	1.0	1	1.0	2	1.0
(range)	(1-3)	(1-3)	(1-6)	(1-6)	(1-5)	(1-2)
Spent a night in hospital (%)	29.5	15.9	29.6	22.2	38.1	22.2
Median nights spent in	4	2.0	2	3.5	2	2
hospital (range)	(1-13)	(1-10)	(1-21)	(1-14)	(1-26)	(2-25)
Visited a GP (%)	52.3	38.6	87.0	70.4	87.3	58.7
Median times visited GP	3	2.0	3	2	3	2
(range)	(1-16)	(1-10)	(1-90)	(1-15)	(1-12)	(1-10)
Taking medication (%)	54.5	43.2	77.8	64.8	73.0	65.1
Median days taking	90	90.0	90	90	90	90
medication (range)	(5-90)	(1-90)	(1-90)	(12-90)	(1-90)	(1-90)

4.2.5 Goals and confidence in treatment: Baseline to 12 months

4.2.5.1 Goals and confidence in treatment: Baseline to 12 months

At both baseline and 12-month time points, the majority of participants from each group reported they wanted to achieve "complete abstinence from alcohol". Confidence of achieving and maintaining their treatment goal remained stable for both the clinician interviewed and MFU groups; however, participants from the FFU group were significantly more confident in their ability to achieve this goal at 12 months (median 8 out of 10) than at baseline (median 6) (z=-3.001, p=0.003).

Table 26: Treatment goals: Baseline to 12 months

	Clinician interviewed (n=43)		Researcher MFU (n=53)		Researcher FFU (n=63)	
	Baseline	12 months	Baseline	12 months	Baseline	12 months
Complete abstinence	67.4	46.5	75.9	51.9	71.4	50.8
A break from alcohol use	4.7	2.3	3.7	3.8	3.2	12.7
A reduction in use	7.0	9.3	1.9	7.7	6.3	14.3
Control over use	16.3	16.3	16.7	1.9	19.0	7.9
No change	4.7	25.6	1.9	34.6	0.0	14.3

4.2.5.2 Situational confidence in treatment: Baseline to 12 months

Participants' confidence of achieving and maintaining their treatment goal three months into the future changed with time from baseline to 12 months; however, no statistically significant differences were observed.

Participants interviewed by clinicians were slightly less confident that they would achieve and maintain their goal when facing negative emotional states at 12 months (median 6 out of 10) than at baseline (median=7), but were slightly more confident at 12 months (median=7) that that they would achieve and maintain their goal when faced with social situations than at baseline (median=5).

Participants interviewed by researchers reported different changes in confidence over time to those interviewed by clinicians. Both researcher interviewed groups were slightly more confident in their ability to achieve and maintain their goal when faced with negative emotional states at 12 months (MF: median=8, FFU: median=6) than at baseline (median 7 and 6, respectively). Confidence of achieving and maintaining their goal when faced with social situations, however, remained stable over time.

SUMMARY

All three client groups (clinician interviewed and researcher MFU and FFU groups) demonstrated significant improvement in treatment outcome from baseline to 12 months.

Alcohol use

- Significant reductions in days of alcohol use and number of drinks consumed per day for both the clinician and researcher interviewed groups from baseline to 12 months were reported.
- All three client groups indicated significant reductions in alcohol dependence at 12 months.

Summary continued

Other drug use

* Please note drug use among the participants at 12 months was considerably low.

- All three client groups reported smoking significantly less cigarettes per day at 12 months.
- Participants interviewed by clinicians reported significant decreases in days of use from baseline to 12 months for both amphetamines and tranquilisers.
- Participants in the MFU group reported significant decreases in days of use for heroin.
- Participants in the FFU group reported significant decreases in days of use for amphetamines.

Health

- Significant improvements in physical health, general well-being and mental health from baseline to 12 months were reported for all three client groups.

Health service utilisation

- Participants interviewed by clinicians reported a significant reduction in the number of times they accessed the A & E department, number of nights spent in hospital and times they visited a GP.
- Participants in the MFU group reported significant reductions in the number of times they accessed the A & E department and times they visited a GP.
- Participants in the FFU group reported significant reductions in the number of times they accessed the A & E department, number of nights spent in hospital and times they visited a GP.

5.0 RESULTS: PART THREE

Do clients interviewed by clinicians report significantly greater improvement in treatment outcome at three months than clients interviewed by researchers?

5.1 Participants

To allow for a more valid comparison between clinician interviewed participants and researcher interviewed participants at three months, only participants re-interviewed at three months from residential rehabilitation services and therapeutic communities were used for this section of the results.

Similar to the entire baseline sample (see Table 2), the majority of participants came from residential rehabilitation services, had received treatment for alcohol use previously and were in their late 30s. Participants interviewed by clinicians in this sample, however, were significantly more likely to be males than those interviewed by clinicians (x^2=4.124, p<0.001). Table 27 presents a summary of the participants' demographic characteristics.

Table 27: Demographic characteristics: clinician vs researcher interviewed

	Clinician interviewed (n=59)		Researcher interviewed (n=47)	
Treatment type %				
Residential rehabilitation	83.1		74.5	
Therapeutic community	16.9		25.5	
Age (years)				
Mean years (SD)	37.0 (15.3)		37.0 (10.4)	
Range (years)	14-66		18-58	
Sex %				
Male	60.3		40.4	
ATSI %				
Aboriginal and/or Torres Strait Islander	5.3		2.1	
Prior treatment for alcohol use %				
Yes	63.6		66.0	
	Baseline	3 months	Baseline	3 months
Income %				
Employment	22.4	19.3	48.9	17.0
Centrelink benefits	48.2	65.0	42.6	70.2
Living arrangement %				
Alone	27.6	22.0	27.7	10.6
Parents	27.6	11.9	17.0	19.1
Accommodation %				
Rented house/flat	51.7	27.1	53.2	29.8
AOD residence	0.0	39.0	0.0	40.4

5.2 Alcohol use at three months: Clinician vs researcher interviewed

Participants interviewed by clinicians were more likely to report having used alcohol in the past month at follow-up than those interviewed by researchers (50.8% vs 31.9%). However, of those using alcohol, no significant differences in days of use or number of drinks consumed per day existed between the two groups. Participants interviewed by clinicians were also more likely to report "heavy" drinking in the past month than those interviewed by researchers (25.4% vs 10.6%). Again, no significant differences in heavy days or number of drinks consumed existed between the two groups.

Table 28: Alcohol use past 30 days at three months: Clinician vs researcher interviewed

	Clinician interviewed (n=59)	Researcher interviewed (n=47)
Drinking alcohol (%)	50.8	31.9
Median days of use	4.0	5.0
(range)	(1-30)	(1-30)
Median number of drinks	6.0	5.0
(range)	(1-18)	(1-30)
Binge drinking – males (n)	9	2
Median days binge drinking	5.0[#]	18.0[#]
– males (range)	(2-30)	(6-30)
Binge drinking – females (n)	7	5
Median days binge drinking	5.0[#]	7.0[#]
– females (range)	(1-25)	(3-15)
Heavy drinking (%)	25.4	10.6
Median days heavy drinking	4	1[#]
(range)	(1-27)	(1-5)
Median number drinks	12	9[#]
(range)	(2-25)	(7-44)

[#] Interpret with caution, small numbers n<10.

5.2.1 Alcohol dependence at three months: Clinician vs researcher interviewed

Median total SDS scores differed significantly between the two groups. Participants interviewed by clinicians scored lower on the SDS (median=4) than those interviewed by researchers (median=6) ($z=-2.393$, $p<0.017$), indicating a lower dependence to alcohol. No differences between the two groups' SDS total scores existed at baseline.

5.2.2 Alcohol craving at three months: Clinician vs researcher interviewed

A low desire for alcohol was expressed by both groups of participants at follow-up. No differences in craving scores existed between the clinician and researcher interviewed participants (median=1 and 0.5 out of 10 respectively).

5.3 "Other" drug use at three months: Clinician vs researcher interviewed

The number of participants using "other" drugs in the past month at three month follow-up was very low within this sample. Only 18.6% (n=11) of participants interviewed by clinicians and 14.9% (n=7) of participants interviewed by researchers reported using illicit drugs in the past month. The table below presents the percentage of participants using "other" drugs at three months including tobacco. Days of drug use and significance testing has not been reported due to the small number of participants using each drug.

Table 29: "Other" drug use at three months: Clinician vs researcher interviewed

% of participants:	Clinician interviewed (n=59)	Researcher interviewed (n=47)
Tobacco use	76.3	57.6
Number of cigarettes (range)	20 (2-60)	17 (2-35)
Heroin use	3.4	2.1
Opioid use	5.1	0.0
Cannabis use	10.2	14.9
Cocaine use	5.1	2.1
Amphetamine use	8.5	8.5
Tranquiliser use	10.2	0.0

5.3.1 Injecting drug use at three months: Clinician vs researcher interviewed

No significant differences were observed between the two groups for recency of injecting drug use. The majority of both groups reported "never injecting" with less than 10% of both groups (R=8.5% vs C=5.4%) reported injecting in the last three months.

5.4 Health and well-being at three months: Clinician Vs Researcher interviewed

5.4.1 Physical health at three months: Clinician vs researcher interviewed

The majority of participants from both groups rated their health as good (C=33.9% vs R=34.0%). Participants interviewed by clinicians were no more likely to report better health at three months than those interviewed by researchers.

5.4.2 General well-being at three months: Clinician vs researcher interviewed

Participants from both the clinician interviewed and researcher interviewed group rated their well-being at three months as 7 out of 10. No differences between the groups existed.

5.4.3 Mental health at three months: Clinician vs researcher interviewed

At baseline, participants interviewed by researchers reported scored significantly higher on the K10 than those interviewed by clinicians ($t(104)=3.284$, $p<0.001$). At follow-up,

however, no significant difference in total K10 scores between the two groups existed (clinician mean=18.8, SD=8.5 vs researcher mean=18.8, SD=7.7). This suggests that the participants had similar levels of psychological distress at three-month follow-up.

5.4 Health service utilisation at three months: Clinician vs researcher interviewed

Slightly more participants within the researcher interviewed group reported visiting a GP and taking prescribed medication in the past three months than those interviewed by clinicians. However, no significant differences existed between the two participant groups for days or number of times accessed the health services.

Table 30: Health service utilisation at three months: Clinician vs researcher interviewed

In the past 90 days:	Clinician interviewed (n=59)	Researcher interviewed (n=47)
Visited A & E (%)	13.6	14.9
Median times visited A & E	1.0#	1.0#
(range)	(1-2)	(1-2)
Nights spent in hospital (%)	15.3	6.4
Median nights in hospital	4.0#	3.0#
(range)	(1-84)	(1-3)
Visited GP (%)	59.3	70.2
Median times visited GP	3.0	3.0
(range)	(1-24)	(1-20)
Taking medication (%)	54.2	68.1
Median days take medication	90.0	90.0
(range)	(2-90)	(3-90)

Interpret with caution, small numbers n<10.

5.6 Goals and confidence in treatment at three months: Clinician vs researcher interviewed

The majority of participants in both groups wanted to achieve "complete abstinence from alcohol" (C=58.6% vs R=74.5%). Approximately one-fifth of participants interviewed by clinicians wanted to be able to "control" their alcohol use, whereas considerably less researcher interviewed participants (12.8%) wanted to achieve this.

Table 31: Goals of treatment at three months: Clinician vs researcher interviewed

% of participants	Clinician interviewed (n=58)	Researcher interviewed (n=47)
Complete abstinence	58.6	74.5
A break from alcohol use	1.8	0.0
A reduction in alcohol use	8.6	10.6
No change in alcohol use	10.3	2.1
Control over alcohol use	20.7	12.8

No significant differences were observed between the clinician and researcher interviewed groups in their: confidence of achieving their treatment goal (C median=8 vs R median=7), confidence of achieving and maintaining treatment goal when faced with negative emotional states (C=6.5 vs R=7), or their confidence of achieving and maintaining their treatment goal when faced with social situations (C=7 vs R=8). All confidence scores were rated on a scale out of 10.

SUMMARY

Clients interviewed by clinicians at three months did not report significantly greater improvement in treatment outcome than clients interviewed by researchers at three months.

Alcohol use

- Abstinence at three months was higher amongst the researcher interviewed group.
- No differences existed in days of use or number of drinks consumed per day between the groups.
- Clients interviewed by clinicians were significantly less dependent on alcohol than researchers at three months.
- No differences existed between the participants' desire for alcohol at three months.

Other drug use

- Days of other drug use amongst the two groups at three months was particularly low, no statistically significant differences existed.

Health

- Clients interviewed by clinicians were no more likely to report better physical health, well-being or improved levels of psychological distress at three months than those interviewed by researchers.

Health service utilisation

- No significant differences existed between the two groups for days or times accessed the health services.

* Please note this section only includes participants re-interviewed at three months from residential rehabilitation services and therapeutic communities .

6.0 RESULTS: PART FOUR

Do clients interviewed more frequently demonstrate significantly greater improvement in treatment outcome at 12 months than those interviewed minimally?

6.1 Participants

In order to determine whether there is any subject reactivity effects of frequent follow-up on outcome, participants re-interviewed at 12 months from the MFU and FFU groups will be compared in this section of the results.

Similar to the entire baseline sample (see Table 2), the majority of participants came from residential rehabilitation services, had received treatment previously and were in their late 30s. As can be seen from Table 32 below, the two groups of participants re-interviewed by researchers at 12 months have remarkably similar demographic characteristics to each other.

Table 32: Demographic characteristics: MFU vs FFU

	MFU (n=54)		FFU (n=63)	
Treatment type %				
Residential rehabilitation	57.4		50.8	
Therapeutic community	5.6		12.7	
Counselling/outpatient	0.0		3.2	
Detoxification	37.0		33.3	
Age (years)				
Mean years (SD)	39.2 (10.7)		39.3 (10.4)	
Range (years)	21-77		18-62	
Sex %				
Male	55.6		52.4	
ATSI %				
Aboriginal and/or Torres Strait Islander	7.4		0.0	
Prior treatment for alcohol use %				
Yes	72.2		68.3	
	Baseline	12 months	Baseline	12 months
Income %				
Employment	37.0	35.2	39.7	39.7
Centrelink benefits	51.9	53.7	54.0	54.0
Living arrangement %				
Alone	37.0	29.6	25.4	32.3
Parents	20.4	22.2	27.0	19.0

	MFU (n=54)		FFU (n=63)	
	Baseline	12 months	Baseline	12 months
Accommodation %				
Rented house/flat	42.6	37.0	39.7	44.4
Privately owned house/flat	53.7	51.9	49.2	36.5

6.2 Alcohol use at 12 months: MFU vs FFU

Participants within the FFU group were more likely to report having used alcohol in the past month at follow-up than those within the MFU group (66.7% vs 59.3%). However, of those using alcohol, no significant differences in days or number of drinks consumed per day existed between the two groups. Participants within the FFU group were also more likely to report "heavy" drinking in the past month at follow-up than those in the MFU group (38.1% vs 29.6%). Again, no significant differences in heavy days or number of drinks consumed existed between the two groups.

Table 33: Alcohol use at 12 months: MFU vs FFU

	MFU (n=54)	FFU (n=63)
Drinking alcohol (%)	59.3	66.7
Median days of use	8.0	20.0
(range)	(1-30)	(1-30)
Median number of drinks	9.0	9.0
(range)	(9-28)	(2-27)
Binge drinking – males (n)	18	18
Median days binge drinking	14.0	20.0
– males (range)	(1-36)	(1-30)
Binge drinking – females (n)	9	18
Median days binge drinking	8.0	20.5
– females (range)	(5-30)	(1-30)
Heavy drinking (%)	29.6	38.1
Median days heavy drinking	3.5	2.5
(range)	(1-20)	(1-6)
Median number drinks	21.0	17.5
(range)	(6-60)	(4-30)

6.2.1 Alcohol dependence at 12 months: MFU vs FFU

Mean total SDS scores did not differ significantly between the two groups. Participants within the MFU group scored slightly lower on the SDS (M=4.6, SD=3.9) than those within the FFU group (M=6.3, SD=5). No differences existed between the two groups total SDS scores at baseline either.

6.2.2 Alcohol craving at 12 months: MFU vs FFU

A low desire for alcohol was expressed by both groups of participants at 12-month follow-up. No significant differences in craving scores existed between the MFU and FFU groups, with both groups producing a median of two out of 10 (range 0-10).

6.3 "Other" drug use at 12 months: MFU vs FFU

The number of participants using drugs at 12 months within this sample was considerably lower than at baseline. At follow-up, 35.2% (n=19) of participants in the MFU group and 27.0% (n=17) of participants in the FFU group reported using illicit drugs in the past month. The table below presents the percentage of participants using "other" drugs at 12 months including tobacco. Days of use and significance testing has not been reported due to the small number of participants using each drug (days of cannabis use was tested; however, no differences were found).

Table 34: "Other" drug use at 12 months: MFU vs FFU

% of participants	MFU (n=54)	FFU (n=63)
Tobacco use	77.8	79.4
Median number of cigarettes (range)	17.0 (3-45)	18.5 (2-60)
Heroin use	0.0	3.2
Opioid use	11.1	1.6
Cannabis use	31.5	20.6
Cocaine use	1.9	1.6
Amphetamine use	11.1	6.3
Tranquiliser use	7.4	7.9

6.3.1 Injecting drug use at 12 months: MFU vs FFU

No significant differences were observed between the two groups for recent injecting drug use. The majority of both groups reported "never injecting" (MFU=65.4% vs FFU=68.9%), with only 11.5% of the MFU group and 6.6% of the FFU group reporting injecting in the past three months.

6.4 Health and well-being at 12 months: MFU vs FFU

6.4.1 Physical health at 12 months: MFU vs FFU

The majority of participants from both groups rated their health at 12 months as good (MFU=37.0% vs FFU=33.3%). Participants in the FFU group were no more likely to report better health at 12 months than those in the MFU group.

6.4.2 General well-being at 12 months: MFU vs FFU

Participants from both the MFU and FFU groups rated their general well-being at 12 months as seven out of 10. No differences existed between the groups.

6.4.3 Mental health at 12 months: MFU vs FFU

No significant differences existed between the two groups and their mean K10 total scores at 12 months (MFU=22.4, SD=9.1 vs FFU=21.4, SD=9.6). This suggests both participant groups had similar levels of psychological distress at 12 month follow-up.

6.5 Health service utilisation at 12 months: MFU vs FFU

Slightly more participants in the MFU group reported attending the A&E department and visiting a GP in the past three months than those in the FFU group, whereas slightly more participants in the FFU group were taking prescribed medications. However, no significant differences existed between the two groups for days or number of times they accessed health services.

Table 35: Health service utilisation at 12 months: MFU vs FFU

In the past 90 days:	MFU (n=54)	FFU (n=63)
Visited A & E (%)	24.1	19.0
Median times visited A & E	1.0	1.0
(range)	(1-6)	(1-2)
Nights spent in hospital (%)	22.2	22.2
Median nights in hospital	3.5	2.0
(range)	(1-14)	(1-25)
Visited GP (%)	70.4	58.7
Median times visited GP	2.0	2.0
(range)	(1-15)	(1-83)
Taking medication (%)	64.8	65.1
Median days take medication	90.0	90.0
(range)	(12-90)	(1-90)

6.6 Goals and confidence in treatment at 12 months: MFU vs FFU

The majority of participants in both groups wanted to achieve a "complete abstinence from alcohol" (MFU=50% vs FFU=50.8%). A third of participants in the MFU group (33.3%) wanted to achieve "control" over their alcohol use whereas a considerably lower number of participants in the MFU group reported this as their goal (14.3%).

Table 36: Goals of treatment at 12 months: MFU vs FFU

% of participants	MFU (n=54)	FFU (n=63)
Complete abstinence	50.0	50.8
A break from alcohol use	3.7	12.7
A reduction in alcohol use	7.4	14.3
No change in alcohol use	1.9	7.9
Control over alcohol use	33.3	14.3

Overall, the MFU group reported higher confidence in achieving and maintaining treatment goals. However, no significant differences were observed between the two groups in their confidence of achieving their treatment goal (MFU=8 vs FFU=6); confidence of achieving and maintaining treatment goal when faced with negative emotional states (MFU=8 vs FFU=6); or their confidence of achieving and maintaining their treatment goal when faced with social situations (MFU=8 vs FFU=6). All confidence scores were rated out of 10.

SUMMARY

Clients within the FFU group at 12 months did not report significantly greater improvement in treatment outcome than clients within the MFU group at 12 months.

Alcohol use

- Abstinence at 12 months was higher amongst the MFU group.
- No differences existed in days of use or number of drinks consumed per day between the groups.
- No differences in alcohol dependence or craving was found between the two groups.

Other drug use

- Days of other drug use amongst the two groups at 12 months was particularly low (with the exception of cannabis); no statistically significant differences existed.

Health

- Clients in the FFU group were no more likely to report better physical health, well-being or improved levels of psychological distress at 12 months than those in the MFU group.

Health service utilisation

- No significant differences existed between the two groups for days or times that they accessed the health services.

* Please note this section only includes participants re-interviewed by researchers at 12 months.

7.0 RESULTS: CLINICIAN ASSESSMENT AND FEEDBACK SURVEY

7.1 Description of participants

A total of 17 completed interviews were returned (50% response rate) representing seven out of the nine treatment agencies involved in the feasibility study. The majority of respondents were male (53%) and worked within residential rehabilitation services (59%). The median age of respondents was 43 years (range 25-55 years) and they had worked approximately four years (median) in the AOD field (range 1-22 years). The qualifications of those who participated in the survey are represented below.

Table 37: Qualification of respondents

Qualification*	%
AOD counsellor/worker	59
Nurse	43
Psychologist	29
Doctor	6

* Please note the total does not add up to 100% as some respondents reported more than one qualification relevant to their position.

Seventy-one percent of respondents reported administering the AATOM-C on a regular basis, whilst 59% had also conducted at least one follow-up interview prior to survey completion. Approximately 80% of AOD counsellors administered the interview on a regular basis compared to 40% of "other" professional staff.

7.2 Usefulness of the AATOM-C

Table 38 illustrates that the majority of clinical staff using the AATOM-C felt that it was a clinically relevant instrument (82%), that it measured key outcomes (83%) and was useful for assessing new clients (69%). Thirty-five percent of respondents, however, were unsure whether the instrument would be helpful for tracking client progress throughout treatment.

Table 38: Usefulness of the AATOM-C (n=17)

	Disagree	Neither agree nor disagree	Agree	Median score
1. The AATOM-C is a clinically relevant instrument	12%	6%	82%	4.0
2. The AATOM-C measures key alcohol treatment outcome variables	12%	6%	83%	4.0
3. The AATOM-C helps demonstrate objective outcomes (n=16)	12%	19%	69%	4.0
4. The AATOM-C was helpful for assessing new clients	12%	6%	83%	5.0
5. The AATOM-C scores are helpful for tracking client progress whilst in treatment	12%	35%	54%	4.0

7.3 Content of the AATOM-C

Two-thirds of all clinical staff using the AATOM-C believed the instrument covered relevant information and the core of what they needed to know about each client's general health and well-being, alcohol use/history and goals of treatment (Table 39). However, a quarter of participants (25%) did not believe that Sections D and E adequately covered what they would like to know about their clients.

Table 39: Content of the AATOM-C (n=17)

	Disagree	Neither agree nor disagree	Agree	Median score
6. Section A – Demographic details	30%	0%	71%	4.0
7. Section B – Health and well-being	18%	12%	71%	4.0
8. Section C – Alcohol use	12%	0%	88%	5.0
9. Section C – Treatment goals	12%	0%	88%	5.0
10. Section D – Other drug use	24%	6%	71%	4.0
11. Section E – Health service utilisation	24%	12%	64%	4.0

7.4 What do AOD workers find most useful about the AATOM-C?

Comments on the usefulness of the AATOM-C instrument focused primarily on its potential role as a baseline assessment tool with an ability to track client progress over time. One respondent stated, "[the AATOM-C] indicates where the client is at in early treatment and if follow-up is accurate can see progress in many areas".

Other comments focused on the value of including client treatment goals and the Likert scale questions to assess perceived success at achieving the indicated goal in the future, whilst encountering particular situations. A counsellor within a residential rehabilitation facility recalled: "…it was very useful when it asked clients' perceived success whilst in different situations and different emotions". Such information was also found to be useful for incorporating relapse prevention strategies into treatment programs.

The simplicity involved in the administration of the AATOM-C and the favoured "more interactive than more paperwork" approach of the E-AATOM were also deemed useful attributes of the instrument and its components. The objectivity of the AATOM-C was also mentioned.

7.5 What do AOD workers find least useful about the AATOM-C?

A number of concerns were raised regarding the content and structure of the AATOM-C. For example, concerns included questioning the relevance of including Section E (health service utilisation questions), the sole use of client self-report measures and the limited number of questions examining the client's use of other drugs. Suggestions for improvement, however, were limited and contradictory, either focusing on the inclusion of additional measures, as one psychologist stated: "include measures such as family members report, physiological indicators such as liver function test results" in addition to requests for more background information, or alternatively the removal of a number questions because

the instrument was found to be too time consuming. A few respondents also expressed concerns about the feasibility of the instrument and its ability to accurately measure change/effect of treatment.

Structural concerns were focused more on hindrances that had been uncovered during the administration of the instrument. For example, two suggestions for improvement were: 1. the addition of an extra response category into 12c of the follow-up AATOM-C (types of counselling received) as a detoxification worker recall: "there was no availability for group and counselling only one or the other as out clients participate in both"; and 2. "adding room for prior to custody if not in community to get an accurate idea of drinking patterns".

7.6 Administration, implementation and structure of the AATOM-C

The majority of those using the instrument were happy with the structure of the AATOM-C interview, with approximately 41% of the respondents considering the continued use of the instrument once the study is over (Table 40). Thirty percent of those participating in the feasibility study felt they did not receive enough support and training for the administration of the AATOM-C. However, it was not specified whether support was lacking from agency management or from research staff of the AATOM-C project.

Table 40: Administrative support and structure of the AATOM-C (n=17)

	Disagree	Neither agree nor disagree	Agree	Median score
12. The AATOM-C is brief and took on average 15 minutes to administer	18%	0%	82%	4.0
13. The order and arrangement of questions contribute to the flow of administration	12%	12%	76%	4.0
14. I received sufficient support and training for administration of the AATOM-C	30%	0%	71%	5.0
15. I found the AATOM-C administration and procedure manuals useful*	19%	25%	56%	4.0
16. I was able to integrate information obtained from the AATOM-C into client case management	18%	6%	77%	4.0
17. I will continue to use the AATOM-C instrument even after the study is finished	25%	18%	47%	3.0

* n=16

7.7 Strategies used for improving implementation and administration of the AATOM-C

A number of key approaches were identified as contributing to the successful implementation and administration of the AATOM-C within the agencies. The most commonly reported strategy was incorporating the AATOM-C into currently mandated items such as the BTOM or the agencies' own assessments. Other strategies included:

designating one person to conduct the interviews and complete the AATOM-C interview at the time of admission: "one person to administer, always the person doing the admission paperwork". Respondents from residential rehabilitation services believed supportive managers "…who were very helpful in the sense of willingness to do the research" and trained staff/clinicians "… [who] were comfortable with administering these tests" also reportedly encouraged compliance. Suggested strategies for future use of such measures included employment of a research assistant for "extra help when necessary" and the continued reminders of when follow-ups were due.

7.8 Main barriers to successful implementation of the AATOM-C

Staff turnover and time were reported to be the most commonly encountered barriers to successful implementation of the AATOM-C within the participating agencies. The two issues were often linked with one another; for instance, additional time was often needed to train new staff. Administering the interview was often viewed as "another survey to fill out", with a few respondents indicating "some questions were already covered in our assessment [and] some were repeated in slightly different wording". Technical issues relating to the E-AATOM were reported as barriers to implementation, for example, the safeguards to maintain participant confidentiality often made it difficult for clinical staff to match information from the E-AATOM to their own records. Participant follow-up at baseline was also of concern to clinical staff as an AOD worker reported: "a lot of our clients had moved on before the follow-ups could be done", implying that contact is lost once treatment ceases.

7.9 Plans to make use of the AATOM-C data

Approximately one-third of respondents administering the AATOM-C were unsure whether their agencies as a whole were planning on using the data obtained from the instrument, whereas others at the individual level could see themselves incorporating such information into case management, treatment planning, relapse prevention strategies and client assessment summaries. One respondent was also interested in looking at AATOM-C scores pre and post treatment. A few respondents, however, did report that their agencies did not have any plans for using the data from the AATOM-C at the time the survey was completed.

7.10 The E-AATOM

In total, five of the nine participating treatment agencies chose to use the E-AATOM for at least a period of time during the feasibility phase of the AATOM study. Of those using the E-AATOM, over half of the respondents preferred to use it over the paper version (55%), found it to save time (50%) and was easy to use (66%) (Table 41).

Table 41: The E-AATOM (n=12)

	Disagree	Neither agree nor disagree	Agree	Median score
18. Our agency had the equipment to introduce the E-AATOM	17%	17%	66%	4.0
19. The E-AATOM was appropriate to use within our agency*	10%	10%	80%	4.5
20. I prefer to use the E-AATOM over the paper version#	9%	36%	55%	4.00
21. The E-AATOM is easy to use	17%	17%	66%	5.0
22. The E-AATOM saves time and resources	17%	33%	50%	4.0
23. The ability to export data into excel files for analysis is useful#	9%	27%	69%	4.0

* N = 10
# N = 11

7.11 General views on outcome measures

The vast majority of respondents possessed a positive attitude towards outcome measures in general, the benefits they provided and believed that a standardised alcohol treatment tool was necessary within the AOD sector (Table 42).

Table 42: General views on outcome measures (n=16)

	Disagree	Neither agree nor disagree	Agree	Median score
24. It is important to be able to monitor treatment outcomes across different settings, allowing for comparison between treatment types	12%	0%	88%	4.50
25. A standardised alcohol treatment outcome tool is much needed within the AOD sector	19%	13%	68%	4.50
26. Data obtained from outcome measures should influence treatment decision making	13%	0%	87%	4.00

8.0 DISCUSSION AND CONCLUSION

The AATOM-C was developed for routine clinical use to monitor treatment outcomes of clients receiving treatment for problems arising from their alcohol use. It was created to be a multi-dimensional, standardised and psychometrically sound instrument for use by health professionals within the Australian context. Clinically focused, the AATOM-C was designed to measure treatment outcome across the domains of health and well-being, alcohol and drug use, alcohol dependence, treatment goals and health service utilisation.

The aim of this study was to assess the feasibility of implementing the AATOM-C on a routine basis within alcohol treatment services over a 12-month period. The study hypotheses stated that: clients would demonstrate significant improvement in outcome over time; clients interviewed by clinicians would report greater improvement than those interviewed by researchers; and clients interviewed more frequently would report greater improvement than those interviewed less frequently.

A total of 348 clients new to AOD treatment with a current concern for their alcohol use were recruited to take part in the study. Of those, 148 clients were interviewed by clinicians and AOD workers at baseline, three and 12 months and 200 were interviewed by researchers either at baseline and 12 months (MFU) or at baseline, three, six, nine and 12 months (FFU). An electronic version of the AATOM-C, the E-AATOM was used by a number of agencies to assist in the facilitation of data collection.

The majority of all participants interviewed at baseline were male (55.1%), received a government allowance as their main source of income (57.6%), lived alone (31.4%) and were currently receiving treatment at a residential rehabilitation service (59.8%). The mean age of all participants was 36.9 years.

Follow-up rates differed amongst the interviewer groups, with the researcher FFU group re-interviewing the greatest number of clients at both three and 12 months from baseline. Clinicians were remarkably less successful in following up clients at 12 months. Following up clients once they had left treatment posed a significant problem for clinicians who took part in the study. The most common barrier to successful follow-up was the amount of time needed to track down clients once they have left treatment. Often multiple phone calls were needed to secure a follow-up interview. Other barriers have included failure to obtain client follow-up and third-party contact details, and a lack of interest in the study.

Alternatively, the frequency of contact between the interviewer and the client within the 12 month study period may have contributed to the higher follow-up rate for those in the researcher FFU group, where those in the researcher MFU and clinician interviewed groups had longer periods of time between interviews in which the client may have moved house or changed phone number etc. However, it is worth noting that the researcher MFU group had the least contact between interviews, yet still had a higher follow-up rate than the clinician interviewed group at 12 months.

The majority of participants interviewed by both researchers (74.6%) and clinicians (54.2%) at three months had left their baseline treatment episodes. Of those, 75% of participants in the researcher interviewed group and 84% of participants in the clinician interviewed group reported being referred to another treatment type after leaving. Counselling was the most common treatment participants engaged in following separation from their baseline treatment type.

Results of the study indicate that each client group did demonstrate significant improvement in treatment outcome over time. As a primary outcome of alcohol treatment, the percentage of clients using alcohol decreased significantly at both three and 12 months from baseline. Days of use and number of drinks consumed on "typical" and "heavy" drinking days also decreased significantly from baseline to three and baseline to 12 months for all client groups. Over the 12-month period, reported levels of alcohol use remained much lower (on average) than pre-treatment/baseline levels, with over a third of all those re-interviewed at 12 months reporting abstinence from alcohol in the 30 days prior to interview.

All client groups reported significant reductions in their levels of alcohol dependence from baseline to three months and baseline to 12 months. Participants interviewed by clinicians reported a significant reduction in their desire for alcohol (alcohol craving scale) at three months. However, at 12 months, no significant differences in alcohol craving were found to exist for any of the client groups, indicating desire for alcohol at 12 months was similar to pre-baseline levels.

A decrease in the number of participants using "other" drugs was observed across all drug categories at both three and 12 months from baseline. More specifically, at three month, significant reductions in days of use were found for: cannabis (C & R interviewed), tranquilisers (C & R), amphetamines (R) and the number of cigarettes smoked per day (C & R). Participants interviewed 12 months from baseline reported significant reductions in days of use for: amphetamines (R – FFU group & C), heroin (R – MFU), tranquilisers (C) and number of cigarettes smoked per day. Caution must be taken when interpreting changes in "other" drug use amongst this sample due to the small number of participants reporting use of other drugs at both follow-up time points.

Over time, levels of general health and mental well-being were found to improve for all client groups. At both three and 12 months, participants were more likely to rate their health as very good or excellent than at baseline. All participants reported significant increases in their general well-being at both follow-up time points. Levels of psychological distress amongst the participants also decreased significantly.

Changes in health service utilisation over time were found to occur over the study period. Participants interviewed by researchers in the MFU group reported a reduction in the number of times they visited the A & E department and the number of times they visited a doctor. Participants within the FFU group reported significant reductions from baseline to both three and 12-month follow-up, in the number of times they visited the A & E department, the number of nights spent in hospital and the number of times they visited a doctor. Participants interviewed by clinicians only reported significant reductions in the number of times they visited the A & E department at three months; however, at 12 months,

significant reductions were found for the number of times they visited the A & E department, the number of nights spent in hospital and times visited a doctor.

Overall, findings from this part of the study indicate that the AATOM-C instrument is capable of measuring change in client outcome over time. Such findings also highlight that clients receiving treatment for alcohol use exhibit significant improvement over time and across a range of core outcome variables contained within the AATOM-C instrument.

It was hypothesised that clients interviewed by clinicians would demonstrate significantly greater improvement in outcome at three months than those interviewed by researchers (exhibiting a social desirability effect). To ensure a more valid comparison between the two groups, only participants recruited from residential rehabilitation services and therapeutic communities were analysed for this part of the study.

Overall, findings from this part of the study did not indicate a strong social desirability effect to be present among this sample. At three months, a higher number of participants within the clinician interviewed group reported drinking alcohol in the 30 days prior to interview. However, no significant differences in days of use or number of drinks consumed per day were found between the two groups. Level of alcohol dependence at three months was found to be lower in the clinician interviewed group; however, no differences were found between participants' desire for alcohol.

The number of participants using "other" drugs at three months was very low for this particular sample and therefore days of use was not calculated. However, the percentage of participants using each drug was very similar between the two groups. The greatest observed difference was the larger number of participants using tranquilisers amongst the clinician interviewed group (C=10.2% vs R=0%). The higher use of tranquilisers amongst the clinician interviewed group needs to be interpreted with caution, as it is believed that the medical use of tranquilisers may have been mistakenly recorded as illicit drug use.

Levels of general health and mental well-being in the two groups were very similar at three months, with both groups reporting significant improvement from baseline. Participants in the clinician interviewed group did not report better outcomes than those interviewed by researchers. Overall, levels of health service utilisation in the two groups decreased from baseline to three months; however, no significant differences in access to these services existed between the two groups at three months.

It was also hypothesised that those who were interviewed more frequently (FFU group) would demonstrate significantly greater improvement in outcome at 12 months than those interviewed minimally (MFU group). Overall, findings from this component of the study indicate that the frequency of follow-up did not play a significant role in improving treatment outcome over time within this sample.

At 12 months, a higher number of participants within the FFU group reported drinking alcohol in the 30 days prior to interview; however, no significant differences in days of use or number of drinks consumed per day were found between the FFU and MFU groups. The number of participants who reported heavy drinking was also lower amongst the MFU

group. Also, no significant differences were found between the two groups in regards to alcohol dependence or craving at 12 months.

Similar to the three month sample, the number of participants using "other" drugs at 12 months was very small; however, overall, the percentage of participants in the FFU group reporting use of other drugs was lower than the MFU group.

Levels of general health and mental well-being in the two groups at 12 months were also very similar, with no significant differences existing between the groups. No differences were observed between the MFU and FFU groups for level of health service utilisation measures.

The final component of the study involved eliciting the attitudes and experiences of clinicians and AOD workers utilising the AATOM-C during the 12-month feasibility study. The majority of those who provided feedback on the AATOM-C were male, in their early 40s and worked in residential rehabilitation services. Overall, the AATOM-C was viewed as a clinically relevant and useful instrument that covered the core of what those working in the alcohol treatment field wanted to know. Identified strategies to improve implementation and administration of the instrument on a routine basis included having supportive managers who encouraged the use of the instrument and incorporating the instrument into already existing data collection practices. The main barriers identified which were felt to impede on the successful use of the AATOM-C included stuff turnover, time constraints and lack of interest.

Conclusion

The AATOM-C was created to provide a brief, multi-dimensional and psychometrically sound clinical instrument to the Australian treatment field that was specific to the routine measurement of alcohol treatment outcomes. The current study was conducted to determine the feasibility of implementing the AATOM-C on a routine basis within alcohol treatment services over a period of 12 months. Overall, results of this study indicate that the AATOM-C can be used successfully and confidently within Australian alcohol treatment services as a routine measure of alcohol treatment outcome.

During the psychometric testing phase, the AATOM-C instrument was found to be brief to administer and have overall good reliability and validity. In addition to this, the current 12 month feasibility study has extended such findings to show that the AATOM-C is sensitive to measuring change in key treatment outcome indicators over time, regardless of whether clients are interviewed by their treating clinicians or by independent interviewers.

Results of the current study also indicate that clients interviewed using the AATOM-C do not report better outcomes to clinicians involved with their treatment when compared to clients administered the interview by independent interviewers. This suggests the AATOM-C is capable of measuring real changes in outcome without being subject to social desirability effects. In addition to this, frequency of follow-up was not found to play a significant role in improving treatment outcome over time. This also suggests that the administration of the

AATOM-C interview itself over time did not act as a type of brief intervention producing change and therefore the number of follow-up interviews administered to the client can be left to the discretion of the treating clinician who is monitoring the individual for case management purposes.

The scope of the 12-month feasibility study was limited in a number of ways: 1. clinicians administering the AATOM-C interview came primarily from non-government AOD treatment agencies within the greater Sydney region; and 2. the majority of clients were recruited from non-government Sydney AOD treatment agencies (only 50 clients were recruited from Melbourne). Replication studies extending to both private and public AOD agencies outside of the Sydney region need to be conducted to enable the AATOM-C to be considered a nationally appropriate routine measure of alcohol treatment outcomes. Further reliability and validity testing also needs to be conducted with specific focus on those variables subject to change within the early days of entering treatment.

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Appendix One: The AATOM-C interview (revised format)

The Australian Alcohol Treatment Outcome Measure for Clinicians (The AATOM-C) Version 2.0

Client code. _____

Agency location. _____

Date treatment commenced. _____

Interview number.

Baseline	☐
3 month follow-up	☐
6 month follow-up	☐
9 month follow-up	☐
12 month follow-up	☐
Other. _____	

Date of interview. _____

Interviewer name. _____

- Has the client ever received treatment for alcohol-related problems?

No	☐ 1
Yes, but more than 3 months ago	☐ 2
Yes, within the last 3 months	☐ 3
Yes, currently in treatment (in addition to this episode)	☐ 4

Length of interview

Start time. _____ Finish time._____

Total. _____ (mins)

Section A: Client Details

The questions in this section provide us with some background information. Please tick only one box for each question unless otherwise stated.

Questions shaded in grey do not need to be completed at follow-up interview.

1. Sex

Male	☐ 1
Female	☐ 2
Not stated/inadequately described	☐ 9

2a. What is your date of birth? _____/_____/_____

2b. *Interviewer to answer, do not read aloud*

Please indicate whether any component of the date of birth, i.e. day, month and/or year was estimated.

Estimated	☐ 1
Not estimated	☐ 2

3. Are you of Aboriginal or Torres Strait Islander origin?

Yes, Aboriginal	☐ 1
Yes, Torres Strait Islander	☐ 2
Yes, Aboriginal and Torres Strait Islander	☐ 3
No	☐ 4
Not stated	☐ 9

4. In what country were you born?

Australia	☐ 1101
Other, please specify _____	☐

5. What language do you prefer to speak?

English	☐ 19
Other, please specify _____	☐

6. What is your main source of income?

Full-time employment	☐ 1
Part-time employment	☐ 2
Temporary benefit (eg sickness, unemployment)	☐ 3
Pension (eg aged, disability, parenting)	☐ 4
Student allowance	☐ 5
Dependent on others	☐ 6
Retirement fund	☐ 7
No income	☐ 8
Other	☐ 9
Not stated/not known/inadequately described	☐ 99

7. Who do you usually live with?

Alone	☐ 1
Spouse/partner	☐ 2
Alone with child(ren)	☐ 3
Spouse/partner and child(ren)	☐ 4
Parent(s)	☐ 5
Other relatives	☐ 6
Friend(s)	☐ 7
Friend(s)/parent(s)/relative(s) and child(ren)	☐ 8
Other	☐ 98
Not stated/not known/inadequately described	☐ 99

8. Do you usually live in a:

Rented house or flat (public or private)	☐ 1
Privately owned house or flat	☐ 2
Boarding house	☐ 3
Hostel/supported accommodation services	☐ 4
Psychiatric home/hospital	☐ 5
Alcohol/other drug treatment residence	☐ 6
Shelter/refuge	☐ 7
Prison/detention centre	☐ 8
Caravan on serviced site	☐ 9
No usual residence/homeless	☐ 10
Other	☐ 98
Not known	☐ 99

Section B: Health and Well-being

The following questions ask about your general health and psychological well-being.

9. In the last 30 days would you say your health was:

Excellent	☐ 1
Very good	☐ 2
Good	☐ 3
Fair	☐ 4
Poor	☐ 5

10. Rate how you feel about your life right now on a scale from 0 to 10, where 0 = my life is really awful right now and 10 = my life is really good right now.

(Circle only one number that best describes the client's response)

0	1	2	3	4	5	6	7	8	9	10
No desire										Uncontrollable desire

11. The next questions are about how you have been feeling during the last 30 days**.** During the last 30 days about how often did you feel…..

(Circle only one response per line)

During the last 30 days, about how often did you feel:	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Tired out for no good reason?	1	2	3	4	5
Nervous?	1	2	3	4	5
So nervous that nothing could calm you down?	1	2	3	4	5
Hopeless?	1	2	3	4	5
Restless or fidgety?	1	2	3	4	5
So restless that you could not sit still?	1	2	3	4	5
Depressed?	1	2	3	4	5
That everything was an effort?	1	2	3	4	5
So sad that nothing could cheer you up?	1	2	3	4	5
Worthless?	1	2	3	4	5

Section C: Alcohol Use

The questions in this section ask about your alcohol use and how you feel about your alcohol use.

12a. How many days in the last 30 days did your drink any drinks containing alcohol?

Please specify _____ days

12b. On a typical day, in the last 30 days, how many standard drinks did you have on those days when you were drinking? (Please refer to the standard drinks chart provided).

Please specify _____ days

Risky drinking

12c. **For use with males**

How many days in the last 30 days did you drink 7 or more standard drinks of alcohol?

Please specify _____ days

For use with females

How many days in the last 30 days did you drink 5 or more standard drinks of alcohol?

Please specify _____ days

Heavy drinking

12d. On the days, in the last 30 days when you were drinking much more heavily than usual, how many drinks did you have?

Please specify _____ number of drinks

12e. How many days, in the last 30 days did you drink at this level?

Please specify _____ days

13. The next 5 questions are about how you have been thinking and feeling about your alcohol use over the past three months (90 days).

Over the past three months (90 days):

13a. Did you ever think your use of alcohol was out of control?

Never or almost never	☐ 0
Sometimes	☐ 1
Often	☐ 2
Always or nearly always	☐ 3

13b. Did the prospect of missing alcohol make you very anxious or worried?

Never or almost never	☐ 0
Sometimes	☐ 1
Often	☐ 2
Always or nearly always	☐ 3

13c. Did you worry about your use of alcohol?

Not at all	☐ 0
A little	☐ 1
Quite a lot	☐ 2
A great deal	☐ 3

13d. Did you wish you could stop?

Never or almost never	☐ 0
Sometimes	☐ 1
Often	☐ 2
Always or nearly always	☐ 3

13e. How difficult would you find it to stop or go without?

Not difficult	☐ 0
Quite difficult	☐ 1
Very difficult	☐ 2
Impossible	☐ 3

The next five questions ask about your lifetime use of alcohol.

Questions shaded in grey do not need to be completed at follow-up.

14. About what age were you when you had your first full serve of alcohol?

    _____ years of age

15. How old were you when you first drank alcohol on a regular basis? (please note regular means at least once a month)

    _____ years of age

16. How old were you the first time drinking began to be a problem for you?

    _____ years of age

17. How old were you the first time you sought treatment for your alcohol use?

    _____ years of age

18. Have you ever required hospital admission for treatment of any alcohol complications? (does not include detoxification clinics).

    Yes ☐ 1
    No ☐ 0

19. Rate your desire for alcohol on a scale of 0 to 10, where 0 = no desire and 10 = an uncontrollable desire for alcohol right not.

    (Circle only one number that best describes the client's response)

0	1	2	3	4	5	6	7	8	9	10
No desire										Uncontrollable desire

20. The following is a list of statements, which one best represents how you feel right now about your alcohol use

I'm basically satisfied with my use and do not plan to change it	☐ 1
I'd like to stop or reduce my use	☐ 2
I have stopped or reduced my use and I've not returned to my previous level	☐ 3

21a. What do you want to achieve in terms of your alcohol use as a result of <u>this</u> treatment? Do you want to achieve:

Complete abstinence from alcohol	☐ 1
A break from alcohol use	☐ 2
A reduction in alcohol use	☐ 3
Control over alcohol use	☐ 4
No change	☐ 5
Not stated/inadequately described	☐ 9

- For each of the following questions rate how confident you are on a scale of 0 to 10, where 0 = not at all confident and, 5 = moderately confident and 10 = very confident.

21b. How confident are you of achieving this goal as a result of this treatment?

(Circle only one number that best describes the client's response)

0	1	2	3	4	5	6	7	8	9	10
Not at all confident					Moderately confident					Very confident

- Think about the next three months and imagine you are in the following situations.

22a. How confident are you that you will achieve and maintain your treatment goal when you are feeling:

ANGRY, DEPRESSED, IRRITATED, WORRIED or STRESSED?

0	1	2	3	4	5	6	7	8	9	10
Not at all confident					Moderately confident					Very confident

22b. How confident are you that you will achieve and maintain your treatment goal when you are:

HAPPY, AT A PARTY, WANT TO FEEL MORE CONFIDENT, or WHEN SOMEONE OFFERS TO BUY YOU DRINKS?

0	1	2	3	4	5	6	7	8	9	10
Not at all confident					Moderately confident					Very confident

Section D: Other Drug Use

The questions in this section ask about your use of other drugs in addition to alcohol.

23. What other drugs have caused you concern in the last three months (90days)?

1._____
2._____
3._____
4._____
5._____

No other drug of concern ☐ 9

- The next eight questions are about your use of tobacco and other drugs in the last one month (30 days).

24a. How many days in the last month (30 days) did you use tobacco?

_____ days

24b. How many cigarettes did you have on a typical day when you did use tobacco?

_____ days

25. How many days in the last month (30days) did you use heroin?

_____ days

26. How many days in the last month (30 days) did you use another non-prescribed or illicitly obtained opioid-based drug (excluding heroin)? That is morphine, pethidine, codeine, or illegally obtained methadone.

_____ days

27. How many days in the last month (30 days) did you use cannabis?

_____ days

28. How many days in the last month (30 days) did you use cocaine?

_____ days

29. How many days in the last month (30 days) did you use amphetamines?

_____ days

30. How many days in the last month (30 days) did you use tranquilisers (benzos, valium, rohypnol)?

_____ days

31. How many days in the last month (30 days) did you use another drug(s) (please specify)?

Other drug used _____

Please specify _____ days

32. Did you last inject/hit up any drug?

In the last 3 months	☐ 1
More than 3 but less than 12 months ago	☐ 2
12 months ago or more	☐ 3
Never injected	☐ 4
Not stated/inadequately described	☐ 9

Section E: Health Service Utilisation

The questions in this section ask about your use of medical services over the past 3 months.

33. During the past 3 months (90 days):

33a. How many times have you had to go to the accident and emergency department for any physical or mental health problem?

_____ times

33b. How many nights total did you spend in a hospital for any physical or mental health problem?

_____ nights

33c. How many times did you see a doctor in a GP office or outpatient clinic for any physical or mental health problem?

_____ days

33d. How many days did you take prescribed medication for any physical or mental health problems?

_____ days

33e. Please specify the type of medication taken:

Anti-depressant	☐ 1
Anti-anxiety	☐ 2
Anti-psychotic	☐ 3
Alcohol medication	☐ 4
Other medications	☐ 5

Baseline interview complete.

If conducting a follow-up interview, please continue to Section F

COMPLETE THE FOLLOWING TWO SECTIONS AT FOLLOW-UP INTERVIEW ONLY

Section F: Treatment specific

The questions in this section will ask about your treatment experiences over the past 3 months.

34. Have you left the original BASELINE treatment episode?

Yes	☐ 1
No	☐ 0 (If no, continue to question 36)

35a. Why did you leave the original treatment?

Treatment completed	☐ 1
Transferred/referred to another service	☐ 2
Left without notice	☐ 3
Left against advice	☐ 4
Involuntary discharge (non-compliance)	☐ 5
Moved out of area	☐ 6
Sanctioned by drug court/court diversion program	☐ 7
Imprisoned, other than through court sanction	☐ 8
Released from prison	☐ 9
Ceased treatment upon expiation	☐ 10
Other	☐ 98
Not stated/inadequately described	☐ 99

35b. Were you referred to a different treatment type?

Yes	☐ 1
No	☐ 0

36. (Note: Responses to parts A – D are recorded on the table below)

ALL QUESTIONS RELATE TO CLIENTS <u>TREATMENT OF ALCOHOL USE</u> WITHIN THE PAST 3 MONTHS

(A). How many times in the past 3 months have you <u>started</u> each of the following treatment types for your <u>alcohol use</u>?

(B). How long did each treatment episode last?

(C). How long ago did you <u>last attend</u> each of these types of treatment for your alcohol use?

(D). Did you complete this treatment type (yes/no)?

Treatment Type	A. Number of times Started treatment	B. Length of each treatment episode (days)						C. Days since last attendance	D. Treatment completed Y/N
		1	2	3	4	5	TOTAL		
Counselling									
Detoxification									
Rehabilitation									
Therapeutic Community									
Other Specify _____									

- **Counselling specific section**

(Continue to the next question if the client did not receive counselling in the past 3 months)

37a. How long did you go to counselling?

_____ weeks

37b. On average, how many counselling sessions of at least 30 minutes did you attend per month in the last 3 months (90 days)?

_____ sessions per month

37c. What principal type of service was provided to you?

Group counselling	☐ 1
Individual counselling	☐ 2
Family counselling	☐ 3

- **Residential specific section**

(Continue to the next question if the client did not receive residential treatment in the past 3 months)

38a. Have you had any drinks containing alcohol since you were admitted to residential treatment three months (90 days) ago?

Yes	☐ 1
No	☐ 2 (If no, continue to question 38).

38b. How many days from discharge did you first have a drink?

_____ days

Section G: Personal Circumstances

The questions in this section ask about your personal circumstances and notable events of change over the past 3 months.

39. During the past three months (90 days):

39a. Have you been in custody, injured, incapacitated or otherwise unable to attend to alcohol treatment?

Yes ☐ 1
No ☐ 0 (If no, continue to question 39).

39b. How many days of that 90 were you unable to attend treatment?

_____ days

40. How satisfied would you say you feel with the treatment you have received in the past three months?

0	1	2	3	4	5	6	7	8	9	10
Not at all satisfied					Moderately satisfied					Very satisfied

Follow-up interview complete.

Appendix 2: AATOM-C Baseline administration and procedure manual

The AUSTRALIAN ALCOHOL TREATMENT OUTCOME MEASURE – CLINICAL VERSION (AATOM-C)

BASELINE ADMINISTRATION AND PROCEDURES MANUAL

May 2008

Prepared by M. Simpson & P. Gates

TABLE OF CONTENTS

The Australian Alcohol Treatment Outcome Measure – Clinical Version (AATOM-C)

1. BACKGROUND

The Australian Alcohol Treatment Outcome Measure – Clinical Version (AATOM-C) was established in response to the need to further standardise treatment outcome measurement across alcohol and other drug (AOD) services. Prior to the development of the AATOM-C, there was no instrument that could monitor the progress of alcohol treatment clients suitable for the Australian treatment context. Therefore the overall aim of the AATOM-C project was to develop a reliable and valid alcohol treatment outcome measurement tool to serve the needs of health professionals and their clients, policy makers, funding bodies and the research community.

The draft version of the AATOM-C has been developed in consultation with a range of experts in the AOD field. The instrument is designed to be used in routine clinical practice in conjunction with client case management. It may be used to investigate the characteristics of persons entering treatment, capture the disability of the client population, document treatment outcomes, inform the planning and development of treatment services and to act as a quality assurance measure.

Key considerations in the design of the AATOM-C were that it:

- be brief and easy to administer;
- would measure treatment outcome across a range of client functioning;
- be sensitive to measuring change in outcome over time;
- have good reliability, validity and sensitivity
- would be integrated into existing data collection practices and reporting requirements; and
- be broadly accepted and appropriate for use by treatment providers across the Australian AOD field.

Results of the psychometric testing indicate this measure has sound reliability and validity overall. Please refer to NDARC Technical Report Number 288 titled: "The Australian Alcohol Treatment Outcome Measure (AATOM-C): Psychometric Properties" for more information.

The AATOM-C project is funded by the Alcohol Education and Rehabilitation Foundation Ltd and is being conducted by the National Drug and Alcohol Research Centre (NDARC) in collaboration with Turning Point Alcohol and Drug Centre Inc and the Network of Alcohol and Other Drug Agencies (NADA).

2. OVERVIEW OF AATOM BASELINE STRUCTURE

The AATOM-C interview is comprised of five sections:

Section A: Demographic Details
Section B: Health and Well-being
Section C: Alcohol Use
Section D: Other Drug Use
Section E: Health Service Utilisation

Preliminary results show this interview should take on average 15 minutes to administer.

It is hoped that the AATOM-C will, in addition to serving as a treatment outcome measure, assist agencies in the management of their clients, thereby reducing any additional burden its own administration would impose upon staff.

3. TRAINING OF STAFF

NDARC personnel will conduct training sessions and supply the *Administration and Procedures Manual* to assist agency staff with data collection. It is essential that all staff administering the AATOM-C be appropriately trained and supervised in its use. Both the accuracy of the information obtained from clients and successful integration into routine clinical practice depend upon the administrator's familiarity with the content and purpose of the AATOM-C instrument.

4. OBTAINING CONSENT FROM CLIENTS TO PARTICIPATE IN AATOM-C STUDY

Obtaining written client consent is necessary given that the AATOM-C, although designed to be administered to clients in conjunction with their case management review meetings, will be collated at NDARC and viewed by research staff. It is suggested that staff explain the purpose of the AATOM-C to clients at the commencement of treatment, before obtaining consent. Clients are free to withdraw from participating in the AATOM-C interview without consequence and without any stated reason at any time. Consent forms will be supplied to interested agencies.

5. CLIENT ELIGIBILITY

To be eligible for participation in the AATOM-C study clients must:

- be within the first 10 days of treatment;
- have a concern for their alcohol use – however alcohol does not need to be their primary drug of concern;

- indicate that they have not had treatment for alcohol related problems in the previous one month prior to interview; and
- give informed consent prior to being interviewed, clients under the age of 18 must have signed consent from their parents before participating.

6. PRIVACY ISSUES

All reporting will be on aggregated data, not on individual clients. Despite this, collection agencies should be aware of the potential for the misuse of the data. Completed interviews sent through to NDARC for data analysis purposes will be stored within locked cabinets for the duration of the study and archived for the required 7 years. No identifying information is kept with these interviews.

7. SUBMISSION OF DATA

All agencies participating in the AATOM-C feasibility study are requested to submit their collected data **by the 21st of each month** (unless an alternative process has been arranged). If possible, use of the E-AATOM is preferred as data can be emailed and directly entered into databases at NDARC. Use of the E-AATOM however will be at your own preference and use availability. If the paper version of the interview is used, please return via registered post. All Agencies submitting data should be sure to retain copies of the AATOM-C interviews and/or electronic files. This will assist with the collection of follow-up interviews.

8. DATA REPORTS FOR AGENCIES

The data collected from agencies will be entered into a statistical database and descriptive and inferential statistics will be generated on the issues of interest. NDARC will provide regular reports (baseline, 3 month and 12 month) on quantitative analysis of aggregated state-wide data in addition to an individualised report for each treatment agency involved. It is not intended to directly compare individual participating agencies.

9. CONTACT DETAILS

If you have any comments or feedback on the forms, code sets or this manual please contact:

Melanie Simpson
National Drug and Alcohol Research Centre
University of New South Wales

SYDNEY NSW 2052

10. AATOM-C DATA COLLECTION PROCEDURE

10.1 Overview

The following protocols and guidelines have been designed to facilitate the introduction and administration of the AATOM into your agencies. It will most likely be necessary to adapt these to suit your local business practices.

For the purposes of the feasibility study, the AATOM-C is designed to be administered for clients entering into treatment (baseline interview) and followed up at 3 months and 12 months. This manual has been designed to facilitate the use of the baseline AATOM-C. Please refer to the separate follow up AATOM-C manual in regards to the practices for the follow up questionnaires. However, outside of the study requirements, please feel free to administer the AATOM-C for your own purposes as a "one off" or on going evaluation tool.

10.2 AATOM-C Administration Process

The AATOM-C is an interviewer administered questionnaire that typically takes 15 minutes to complete. It is suitable for use with English speaking clients entering into treatment, either for the first time or after at least a one month absence from that treatment. "Face-to-face" administration of the AATOM is recommended. It has been demonstrated that client self-administration of the surveys similar to the AATOM (such as the Brief Treatment Outcome Measure) yields poor reliability and hence should not occur. The AATOM has primarily been designed to be used by clinicians as an outcome monitoring instrument and for treatment outcome research. Completion times may vary if the AATOM is utilised as a part of assessment or case management activities where other measures, additional items or further discussion may be required. It is recommended that such additions are made at the end of the relevant section of the questionnaire.

10.2.1 Administration of Baseline AATOM

- All "new clients" entering alcohol treatment can be administered the baseline AATOM-C interview as near as possible to the commencement of treatment. "New clients" are those clients who have not received treatment for a period of **at least one month** prior to their current treatment episode. New clients also include those who have never received any previous treatment. Please refer to point 5 - Client eligibility (page four) for more information.

- The baseline AATOM-C interview must occur within ten days of the first day of treatment. This is necessary given that the first AATOM-C interview aims to provide baseline (pre-treatment) data so that changes overtime can be measured. It is left up to the clinician's discretion to decide when and if the client is functional enough to participate in the interview.

- The way the AATOM-C is introduced and explained to clients improves their willingness to participate:

  Explain to the client that the information is confidential and will only be available to members of the treatment team. Data sent for analysis is de-identified. This means no identifying information is sent and instead a number is used to link baseline and follow up AATOM-C interviews. It is helpful to explain that the AATOM-C is a measurement tool that assists with case management by identifying issues for ongoing treatment planning. Data from the AATOM-C is also useful for quality improvement and evaluation activities as well as providing feedback on how treatment is progressing.

- The baseline AATOM-C interview can be included as either part of the assessment or admission process or it can be conducted during the induction phase of treatment. It is recommended that the administration of the AATOM-C then be included on the corresponding admission or induction checklist. We refer to admission as the assessment and data collection process undertaken prior to the commencement of treatment. We refer to induction as the phase of treatment until day seven. This phase would usually include daily reviews with an experienced clinician to monitor signs of intoxication and withdrawal, concurrent drug use and side effects.

10.2.2 Three Monthly Case Management Review Interviews

Given that the AATOM-C is a treatment outcome measuring instrument, it is imperative to make all reasonable attempts to conduct the 3 monthly review interviews on all clients who are still receiving treatment.

Individual treatment agencies are encouraged to take on board full responsibility for administering and following-up up clients with the AATOM-C interview as part of routine practice. However, each month a researcher from NDARC will email the individual study coordinator at the treatment site a reminder list of the clients due for follow-up. Follow-up interviews should be arranged with each client at a mutually convenient time. Face to face administration of the follow-up interview is preferred however phone interviews are permitted when face to face administration is not possible. It is recommended that at the end of the questionnaire interview the previous AATOM results are discussed as part of the case management review.

10.2.3 Completion of the Baseline AATOM-C Interview

Upon completion of the AATOM-C interview, thank the client and explain that the answers will be scored and the results explained at the next case management appointment. Follow up any issues or concerns raised by the client during the interview. Interventions such as listening, education and referral could then be provided if available. The treatment plan should be updated as required. At the end of the case management appointment the clinician can score the appropriate scales and create a

Score Summary Sheet (see page 17). This summary can be kept along with the client's medical record and treatment plan. There is no need to keep a copy of the AATOM-C interview in the client's medical record. If using the electronic AATOM-C this summary sheet is generated automatically and can be printed at anytime (please refer to the E-AATOM supplement manual).

10.2.4 AATOM-C Collation Process

Completed interviews (paper version) should be collected by the AATOM-C study coordinator for each treatment site. The coordinator checks the questionnaires for accuracy and ensures that no identifying information (client name etc) is written on the interview. Client details should be recorded separately, preferably in an AATOM-C register (either paper or electronic) to facilitate ongoing auditing of the AATOM-C collection process. Questionnaires completed electronically are automatically collated in a previously specified folder on the computer (refer to E-AATOM supplement manual).

As mentioned previously, at the end of each month all completed interviews are to be sent to NDARC for data analysis. Either paper forms or electronic data is to be sent to NDARC by the 21st day of each month (unless otherwise arranged).

10.2.5 Termination and Transfer Process

Clients, participating in the AATOM-C study who transfer to another treatment program should continue to be administered the instrument at the new site where possible. Please inform the new treatment site that the client is taking part in the AATOM-C study, the date of the next follow-up interview and provide copies of previously conduct AATOM-C summary sheets.

If this process is unrealistic, or can not be co-ordinated, or in the event that a treatment episode is closed without notice, the follow up interviews can still be conducted by phone without interruption. Those clients that are taken out of contact completely should be noted in order to inform NDARC (refer to the 3 month and 12 month follow up interview manual supplement).

11. GUIDELINES FOR THE COLLECTION OF DATA

11.1 Agency Code, Agency Location and Client Code

Alcohol and Other Drug Treatment Services in NSW, receiving state government funding will have been provided with an agency code and agency location to be used in conjunction with data collection for the NSW Minimum Data Set for Clients of Alcohol and Other Drug Treatment Services (NSW MDS). These agencies are able to use the same codes for data collection for the AATOM-C. Agencies, which are not collecting data for the NSW MDS can choose their own codes or request to be forwarded an applicable codes to use.

The client code is a unique person identifier, used within an establishment or agency. Agencies can use the client's PSB prescriber number as the client code. The client code must remain the same to enable linking of the client at baseline and review/follow-up interviews and to assist in the tracking of clients across agencies. In any reports or publications the client data will be presented in aggregate form, thus minimising the likelihood of identifying individual clients.

11.2 Version Control and Quality Improvement

Given that the AATOM-C paper and electronic interview will be under continual development, different versions of the form may be in circulation. To standardise the collection process it is recommended that each clinic nominate a local AATOM-C study coordinator who will be responsible for implementing the AATOM-C business processes.

The current version of the AATOM-C is foot-noted "AATOM Version 1.0 November 2005" on both paper and electronic versions. NDARC will send out the new version of the AATOM-C interview to the local nominated AATOM-C coordinators whenever the form is revised. The local AATOM-C co-ordinators are to ensure that all old versions are removed and replaced with the new version of the interview.

To facilitate this, it is recommended that all paper version copies of the AATOM-C form are kept in a central location. Adequate supplies of the form need to be available to clinicians to ensure that data is collected in a timely manner. The electronic version must also be kept under appropriate user names and passwords to ensure confidentiality (see the E-AATOM supplement manual).

11.3 How to conduct the AATOM-C interview

The AATOM-C is designed to be administered by a clinician or AOD worker/counsellor trained in its administration. Where possible the clinician conducting the baseline interview should try to conduct all subsequent follow-up interviews. Client self-completion of the questionnaire is <u>not appropriate</u> as it is very likely to yield unreliable data.

11.4 General points

- No data item is to be left blank. Where a data item is not relevant, tick or code the appropriate response, eg. "No other drugs of concern" or at times there is option to use the "other" code and write in words the client's response.
- All items should be based on the client's response, not clinician guesses or assumptions.
- It is likely that agencies may have to develop their own business rules relating to the collection. Where this is done, the key requirement is consistency across all data collected within the agency. Communication of these rules to NDARC should be made.

11.5 Common Guidelines for Doing a Standardised Interview

Please note the following is presented as a set of guidelines for administering the AATOM-C. Such guidelines aim to promote the standardised administration of the instrument, which in turn will maximise the reliability, validity and ultimate utility of the data collected. It is acknowledged, however, that individual agencies may modify some of these procedures to account for local business practices, for instance if the AATOM-C is incorporated into existing assessment or case management documentation. If this occurs it is suggested that any additions are made at the end of the relevant section of the AATOM-C. Although the order in which questions are asked within sections should remain unchanged, the sections may be administered in any order. The questions which generate the AATOM-C scales and any preamble to these questions must be worded as they are written.

11.5.1 Asking the Questions

Each client must be asked exactly the same question, in the exact order in which they appear in the interview, so that the answers indicating their behaviour, opinion, attitude, or experience are responses to the same stimulus. When a clinician changes the wording in a question, even slightly, answers may change accordingly.

In questions where response categories are part of the question, any change in the order of the response categories may distort results. If a client interrupts a question in order to answer, ask him or her to allow you to read all of the response choices before giving a final answer. Sitting next to the client so they can read the form is helpful but every question needs to be asked out loud.

11.5.2 Ask Every Question

It is not unusual for a client to provide information in the answer to one question that seems to answer another question that occurs later in the form. Every question specified must be asked, even if the clinician feels that he or she already has the answer to a question, based on previous responses.

11.5.3 Read the Complete Question

A client may interrupt you and answer before he or she has heard the complete question. When this happens, read the question again, making sure the client hears it through to the end.

11.5.4 Repeat Questions that are Misinterpreted or Misunderstood by the Client

To do this, you must be familiar with the intent and frame of reference of each question and listen carefully to determine whether or not the response is appropriate before recording.

11.5.5 Read the Questions Slowly

Studies have shown that the reading pace established by the clinician is one of the critical elements of the interview. One clear indication of asking questions too rapidly is the client's frequent request that questions be repeated.

11.5.6 Do Not Suggest Answers to the Client

It is easy to do this unintentionally. Even your facial expressions can reveal your reaction to the content of a response. Clients are typically anxious to please the clinicians and will (either on a conscious or subconscious level) try to shape their answers, if they feel the person does not approve of the behaviour.

When a response conflicts with information the clinician already knows about the client, confronting the client with the discrepancy should be avoided.

11.5.7 Use Introductory or Transitional Statements as they are printed

These occur at points throughout the AATOM form and should be read as worded. They are particularly important for reassuring clients prior to asking about sensitive information.

11.5.8 Use Neutral Probes Only as Necessary

For most questions, probe only as necessary to obtain a clear response that meets the question specifications. The most frequently used probes are:

- Expectant pauses: wait for a few seconds and see if the client elaborates.
- Re-reading the question: sometimes the client simply did not completely hear the question.
- Repeating the answer choices: sometimes the client does not understand the kind of answer you are looking for.
- On some questions, you may need to help clarify and categorise the client's answers.

11.5.9 Listen to the Responses

If the client raises issues that he/she wishes to be addressed, reassure them that any such queries will be answered at the end of the questionnaire.

12. DESCRIPTION OF DATA ITEMS

12.1 Section A: Demographic Details

The first section of the AATOM-C contains items from the NSW Minimum Data Set which are designed to collect social, demographic and treatment service information (New South Wales Department of Health, 2006). Data items that are collected about the

client include: sex, date of birth, Australian Torres Strait Islander status, country of birth, preferred spoken language, main source of income, usual living arrangements and usual place of accommodation. Treatment service details such as treatment delivery setting, main treatment type, and source of referral to treatment, previous treatment received and date of treatment commencement are also collected.

12.2 Section B: Health and Well-being

Research has shown that significant alcohol use is commonly associated with poor health, frequent medical visits (and expenses), subsequent loss of employment and low productivity (Hunkeler et al., 2001) all of which are known to contribute to an individual's deteriorating sense of health, social and personal well-being. Upon presentation to treatment, a client's psychological state (level of distress, anxiety etc.) is commonly found to be a significant predictor of treatment outcome (Moos et al., 1990; Ward et al., 1998). In addition, clients of alcohol and drug treatment centres are found frequently to report lifetime chronic illnesses, recent infections and episodes of trauma (Hunkeler et al., 2001; Larson et al., 2006). Section B of the AATOM-C is designed to assess the general health and well-being (physical and mental) of the client and his or her level of psychological functioning.

Item 9. The physical health of each participant is examined using a question derived from the SF-36 Health Survey (Brazier et al., 1992). Participants are asked to think about their health over the past 30 days and indicate their response on a five-item scale ranging from excellent to poor. The time-frame of this question was adapted to be within the past 30 days to be consistent throughout the instrument. Please ensure that only one response is circled.

Item 10. The general well-being of the participant was measured by asking the participant to rate his or her present quality of life on a 10-point Likert scale ranging from 0 (my life is really awful just now) to 10 (my life is really good just now). Please ensure that only one number is circled, do not circle between points.

Item 11. The Kessler 10 (K-10) (Kessler et al., 2002) was included within the AATOM-C to assess the client's level of psychological distress over the 30 days prior to interview. Clients are asked to indicate on the scale from (1) none of the time to (5) all of the time how often they had felt down, nervous, hopeless, restless, worthless and sad. Each of the ten questions must be answered in order to create an appropriate scale of psychological distress. Clients will receive a score between 10 and 50, the higher the score, the higher the level of psychological distress. To calculate a total K10 score, see below:

To calculate:

1. For each question, the client receives the number of points indicted by the number ticked to show the client's response.

2. Add together the client's points for each question to get the clients K10 score:

$$K10\ score = Q11a + Q11b + Q11c + Q11d + Q11e + Q11f + Q11g + Q11h + Q11i + Q11j$$

12.3 Section C: Alcohol Use

Alcohol use, in particular establishing the context, frequency and amount of alcohol a client is consuming at regular time points throughout the course of treatment (including pre-and post-treatment) is an important indicator of treatment outcome (Kadden & Litt, 2004; Lawrinson et al., 2005). Levels of dependence, craving and knowledge of alcohol treatment access history are also useful predictors of treatment outcome (Lawrinson et al., 2007; McLellan et al., 1994). A client's readiness to change and motivation for treatment are also likely to be early tell-tale signs of treatment success (Copeland et al., 2000). Section C of the AATOM-C instrument was designed to assess a client's alcohol use, dependence, craving, lifetime history of alcohol use and treatment goals and confidence.

Item 12. Part A attempts to establish the client's "typical" pattern of alcohol use. Clients are asked how many days in the last 30 they had drank alcohol and the average number of drinks they consumed on a typical day. A standard drinks chart was used to aid in the standardisation of the instrument.

Part B, participants were asked to identify the number of days in the past 30 that they had drunk alcohol at risky levels. Risky drinking was defined as more than seven standard drinks on one day for males and more than five standard drinks on one day for females (National Health and Medical Research Council, 2001).

Part C recorded whether the participant had consumed alcohol "much more heavily than usual" in the past 30 days. "Heavy" drinking was subject to the interpretation of the participant; however, it reflected an amount that was considered more than average. The number of days of "heavy drinking" was also recorded.

Item 13. The Severity of Dependence Scale (SDS) was used to measure the participant's psychological dependence to alcohol (Gossop et al., 1995). The scale is comprised of five items which examine how the participant has been thinking and feeling about his or her alcohol use during the three months prior to interview. Clients will receive a score between 0 and 15, the higher the score, the higher the level of dependency. To calculate a total SDS score, see below:

To calculate**:**

1. For each question, the client receives the number of points indicted by the number next to the box ticked to show the client's response.

2. Add together the client's points for each question to get the clients SDS score:

$$SDS\ score = Q11a + Q11b + Q11c + Q11d + Q11e$$

Items 14-17. The participant's lifetime history of alcohol use was assessed by examining the age at which they experienced significant alcohol-related life events. Participants were asked to indicate the age at which they: 1. first had a full serve of alcohol, 2. first drank on a regular basis, 3. realised drinking was a problem, and 4. first sought treatment for alcohol use.

Item 18. Participants were asked to indicate whether they had ever needed to go to hospital for treatment of alcohol-related complications.

Item 19. To assess craving, participants were asked to rate their desire for alcohol on a scale from 0 (no desire) to 10 (uncontrollable desire). The craving scale was used as an additional measure of dependence and desire.

Item 20. Part A. From a list of treatment goals ranging from complete abstinence to no change in their alcohol use, participants were asked to assess what they wanted to achieve as a result of their current treatment episode.

Part B. Using the treatment goal nominated in Part A, participants were then asked to assess their confidence (at the time of the interview) in achieving this goal as a result of their current treatment episode. Responses were recorded on a Likert scale ranging from 0 (not at all confident) to 10 (very confident).

Item 21. Parts C-D. The following questions were derived from the Controlled Drinking Self-Efficacy Scale (CDSES) (Sitharthan & Kavanagh, 1990) and again asked participants to rate their confidence of achieving their treatment goal, now looking three months into the future and when experiencing particular social/emotional situations.

12.4 Section D: Other Drug Use

It is important for an outcome measurement tool to be multi-dimensional and capable of capturing the extent of a client's alcohol and other drug use (Lawrinson et al., 2005; Teesson, et al., 2000). Identifying a client as a poly-drug user is of particular relevance to those involved in treatment planning (e.g. health and safety planning). In particular, research has shown that hazardous drinking is common among injecting drug users (Anderson et al., 2001), highlighting a range of health and safety issues relating to the potential risk and contraction of blood borne viruses (Crofts & Aitken, 1997). Section D of the AATOM-C was designed to identify and capture the client's illicit drug use in the past three months and more specifically the days of use in the past month across seven major drug categories. This drug use measure was adapted from the BTOM Occasions of Drug Use Index (Lawrinson et al., 2005). The items will be examined below:

Item 22. Participants were asked to list (up to five) drugs that had caused them concern over the past three months. Once again, this question relied on participant opinion and did not necessarily elicit all drugs the participant had used in that time frame.

Items 23-30. In addition, participants were asked specifically about any illicit drug use in the past 30 days across seven drug categories (tobacco, heroin, illicit opioid-based drugs, cannabis, cocaine, amphetamines and tranquilisers). The number of days the drug was used was recorded.

Item 31. If participants had ever injected an illicit drug they were asked indicate when this last occurred. The given response time-frames were: in the last three months, three-

12 months ago and more than 12 months ago. For those who had never injected, this was also recorded.

12.5 Section E: Health Service Utilisation

Individuals with alcohol/drug dependence are known to be significant consumers of medical resources, with notable increased risk of medical conditions (i.e. chronic illness, vulnerability to infections) and such individuals often become frequent users of emergency departments and hospital services (Larson et al., 2006; De Alba et al., 2004; Rees et al., 2002; Hunkeler et al., 2001).

The final section of the AATOM-C was designed to enhance a clinician's understanding of the client's general health and well-being by eliciting the number of times health services were accessed in the three months prior to interview.

Item 32. This question was derived from the service section of the Global Appraisal of Individual Needs (GAIN) scale (Dennis et al., 1993) and identifies the number of times each client visited the accident and emergency department, the number of nights they spent in the hospital, number of times they visited a GP and the number of days they took prescribed medication. The type of medication taken was also noted.

Table 1. Timing of Data Collection (in italics: NSW Minimum Data Set items)

Commencement of Treatment & at Follow Up Intervals	**Commencement Only**
Agency code *Agency Location* *Client (PSB) Code* **Date of interview** Interviewer name *Commencement of treatment date* *Interview Time* *Sex* *Date of birth* *Indigenous status* *Country of birth* *Preferred language* *Principal source of income* *Type of accommodation* *Living arrangement* Health in past 30 days Health Scale (Question 10) Kessler 10 Scale (Question 11a.-j) Alcohol Use in past 30 days Severity of Dependence scale items (Question 13a.-e.) Alcohol Use History Craving Scale (Question 19) Treatment goals and confidence Other drugs of concern Injecting drug use Health Service Utilisation Treatment Specific Questions **Please note: although responses to some of the items in this section will not change, it is requested that all items be completed.**	*Treatment delivery setting* *Main treatment type* *Source of referral to treatment* *Previous treatment*

Figure 1: STANDARD DRINK CHART

425ml Schooner Full Strength Beer 4.9% ALC/VOL	**285ml** Middy/Pot Full Strength Beer 4.9% ALC/VOL	**285ml** Middy/Pot Low Alcohol Beer 2.7% ALC/VOL
		
1.5	**1**	**0.5**

375ml Full Strength Beer 4.9% ALC/VOL	**375ml** Full Strength Beer 4.9% ALC/VOL	**170ml** Average Serve of Sparkling Wine/Champagne 11.5% ALC/VOL
		
1.5	**1.5**	**1.5**

30ml Spirit Nip 40% ALC/VOL	**100ml** Standard Serve of Wine 12% ALC/VOL	**60ml** Port/Sherry 18% ALC/VOL
		
1	**1**	**1**

These figures have been taken from the Australian Department of Health and Ageing

AATOM-C SCORE SUMMARY SHEET (BASELINE)

CLIENT NAME
CLIENT MRN

AGENCY CODE
COMMENCEMENT OF TREATMENT DATE

Date of interview

Section B **Health and well-being**	**Score**	**Section D** **Other drug use (past 30 days)**	**Score**
[Q9] Health score /5		[Q23] Tobacco /30	
[Q10] Well-being /10		[Q24] Heroin /30	
[Q11] K10 /50		[Q25] Opiates /30	
		[Q26] Cannabis /30	
Section C **Alcohol use (past 30 days)**	**Score**	[Q27] Cocaine /30	
[Q12a] Days of alcohol use /30		[Q28] Amphetamines /30	
[Q12b] Number of standard drinks		[Q29] Tranquilisers /30	
[Q12d] Number of std drinks on heavy days		[Q30] Other (_____) days /30	
[Q13] Dependence score /15			
[Q19] Craving score /10		**Section E** **Health service utilisation (past 90 days)**	**Score**
[Q20] Treatment goal confidence /10		[Q32a] Times visit accident and emergency /90	
[Q21a] Situational confidence –ve /10		[Q32b] Nights spent in hospital /90	
[Q21b] Situational confidence +ve /10		[Q32c] Times visit GP	
		[Qn32d] Days take prescribed medication /90	

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Lawrinson, P., Copeland, J., Gerber, S., & Gilmour, S. (2007). Determining a cut-off on the Severity of Dependence Scale (SDS) for alcohol dependence. *Addictive Behaviors* 32,1474-1479.

McLellan, A. T., Alterman, A. I., Metzer, D. S., Grissom, G. R., Woody, G. E., Luborsky, L., & O'Brien, C. P. (1994). Similarity of outcome predictors across opiate, cocaine and alcohol treatment services. *Journal of Clinical and Consulting Psychology* 62, 1141-1158.

Moos, R. H., Finney, J. W., & Cronkite, R. C. (1990). *Alcoholism Treatment: Context, Process and Outcome.* Oxford University Press, Florida, USA.

National Health and Medical Research Council (2001). *Australian Alcohol Guidelines: Health Risks and Benefits.* National Health and Medical Research Council, Canberra.

New South Wales Department of Health (2006). *2005-2006 and 2006-2007 Data Dictionary and Collection Guidelines for the NSW Minimum Data Set for Drug and Alcohol Treatment Services, Version 5.* New South Wales Department of Health, Sydney.

Rees, V. W., Horton, N. J., Hingson, R. W., Saitz, R., & Samet, J. H. (2002). Injury among detoxification patients: Alcohol users' greater risk. *Alcoholism, Clinical and Experimental Research,* 26, 212-217.

Sitharthan, T., & Kavanagh, D. J. (1990). Role of self-efficacy in predicting outcomes from a programme of controlled drinking. *Drug and Alcohol Dependence* 27, 87-94.

Teesson, M., Clement, N., Copeland, J., Conroy, A., & Reid, A. (2000). *The Measurement of Outcome in Alcohol and Other Drug Treatment: A Review of Available Instruments.* National Drug and Alcohol Research Centre: University of New South Wales, Sydney.

Ward, J., Mattick, R. P., & Hall, W. (Eds.). (1998). *Methadone Maintenance Treatment and Other Opioid Replacement Therapies.* Harwood Academic Publishers, Amsterdam.

Appendix Three: AATOM-C Follow-up administration supplement

The AUSTRALIAN ALCOHOL TREATMENT OUTCOME MEASURE – CLINICAL VERSION (AATOM-C)

FOLLOW-UP SUPPLEMENT

May 2008

Prepared by M. Simpson & P. Gates

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1. AATOM-C Follow-up interview outline

The AATOM-C follow-up interview is comprised of 7 sections:

Section A: Demographic Details
Section B: Health and Well-being
Section C: Alcohol Use
Section D: Other Drug Use
Section E: Health Service Utilisation
Section F: Treatment specific
Section G: Personal circumstances

This interview should take on average 15 minutes to complete.

It is hoped that the instrument will, in addition to serving as a treatment outcome measure, assist agencies in the management of their clients, thereby reducing any additional burden its own administration would impose upon staff.

2. Staff training

NDARC personnel will conduct a secondary training session prior to the first follow-up interview, to assist agency staff with data collection. It is essential that staff who are administering the baseline and follow up AATOM-C be appropriately trained and supervised in its use. Both the accuracy of the information obtained from clients and successful integration into routine clinical practice will depend upon the administrator's familiarity with the AATOM-C instrument's content and purpose.

3. Participant consent

Upon inclusion in the study, clients provided consent to be interviewed at baseline and at regular follow-up intervals over a 12 month period.

4. Client eligibility

A follow-up AATOM-C interview should be administered to all clients who had completed a baseline assessment interview where possible. The follow up AATOM-C should be conducted at three months, and again at twelve months, from the date of baseline interview. There is a period of two weeks before and after the due date that clients can be interviewed.

5. Privacy Issues

All reporting will be on aggregated data, not on individual clients. Despite this, collection agencies should be aware of the potential for the misuse of the data. Please ensure clients that their information will be kept confidential.

6. Three monthly case management review interviews

Given that the AATOM-C is a treatment outcome monitoring instrument, it is imperative to make all reasonable attempts to conduct the 3 and 12 monthly review interviews with all.

Each month the local AATOM-C coordinator or individual case managers should generate a list of clients due for follow-up AATOM-C interview. Case management appointments should be arranged at mutually convenient times.

The AATOM-C has been designed to allow for interviews to be conducted over the phone. However this should only be used in the circumstances whereby a client can not attend the interview in person. It should be emphasised however, that this is not the ideal mode of administration.

7. Follow-up specific questions

Although the follow up AATOM-C has been designed to include the questions from the baseline, it also includes additional questions that are appropriate to clients who have completed the initial stages of treatment. These additional questions are described below.

Section D: Item 18
As an additional question to the alcohol use section, participants were asked to select a response for a list of three statements describing how they were currently feeling about their alcohol use.

Section F: Item 9-10
Section F has been included to gain an understanding of the participant's treatment seeking and experiences over the three months prior to interview. During follow-up, participants are asked whether they had left their baseline treatment episode and if so, were they referred onto a different treatment type. Participants who indicated they had left their baseline treatment are asked to select from a list of options of why they had left. Responses include: treatment completion, left against advice and involuntary discharge etc. If the client's response is not listed, than please specify the response in writing next to the 'other' option box. In the case where a client does not make an intelligible response or refuses to answer, use the 'not stated' box.

Section F: Item 11
Participant treatment experiences during the three months prior to follow-up interview were recorded on a table adapted from the Australian Treatment Outcome Study (ATOS) follow-up questionnaire (Ross, et al., 2002).

Part A. Participants were asked to indicate how many times in the past three months they had started each of the listed treatment types (counselling, detoxification, residential rehabilitation, therapeutic communities and other).

Part B. If the participant had started one of the treatments listed in Part A, they were then asked to state how long each treatment episode lasted for.

Part C and D. Participants were also asked how long ago they had attended the stated treatment type and whether they had completed each of the treatment episode/s.

Section F: Item 12
This question was only applicable to participants who had received counselling for alcohol use in the three months prior to follow-up interview.

Part A. Participants were asked how many weeks they attended counselling for alcohol use in the past three months.

Part B. Participants were then asked to provide the average number of counselling sessions they had received per month

Part C. In addition, participants were also asked to specify the primary type of counselling they had received in the past three months as either a group program, individual or family counselling.

Section F: Item 13
This question was only applicable to participants who had received residential treatment for alcohol use in the three months prior to follow-up interview.

Part A. Participants were asked whether they had consumed any drinks containing alcohol since being admitted to residential treatment.

Part B. If the participant indicated they had a drink, they were then asked how many days from discharge this occurred. If the participant suggested that they had a drink whilst still in treatment, the number of days is recorded was "0".

Section G: Item 31
Part A. Participants were asked to indicate whether there had been a time in the past three months where they were unable to attend treatment for alcohol use. Such reasons could include being held in custody, gaol, being injured, incapacitated or other.

Part B. If the participant suggested that there was a time when they were unable to attend treatment during the previous three months, they were also asked to nominate the number of days they were unable to attend.

Section G: Item 32
If the participant had received any treatment in the previous three months, they were asked to give an overall treatment satisfaction rating on a Likert scale ranging from 0 (Not at all satisfied) to 10 (Completely satisfied).

References:
Ross, J., Teesson, M., Darke, S., Lynskey, M., Hetherington, K., Mills, K., Williamson, A., Fairbairn, S. (2002). *Characteristics of heroin users entering three treatment modalities in New South Wales: Baseline findings from the Australian Treatment Outcome Study (ATOS).* Technical Report No.139, National Drug and Alcohol Research Centre, Sydney.

Appendix Four: E-AATOM: Installation and Use Guide

THE ELECTRONIC AUSTRALIAN ALCOHOL TREATMENT OUTCOME MEASURE (E-AATOM)

INSTALLATION AND USE

November 2007

Prepared by P. Gates and M. Simpson

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THE ELECTRONIC AUSTRALIAN ALCOHOL TREATMENT OUTCOME MEASURE (E-AATOM) MANUAL

1. BACKGROUND

This manual assumes that the reader has previously read the AATOM-C administration and procedures manual, and acts only as a supplement for those using the electronic version of the measure. Please refer to the AATOM-C Baseline Administration and Procedures Manual for information regarding the content and interview practices.

The E-AATOM is designed to reduce the administrative burden of the paper version AATOM and has several features that automate much of the work involved.

This manual is designed to be read in a step-by-step fashion involving practical aspects of the program and should be followed as such. Be sure to follow the instructions and complete each task before reading subsequent sections.

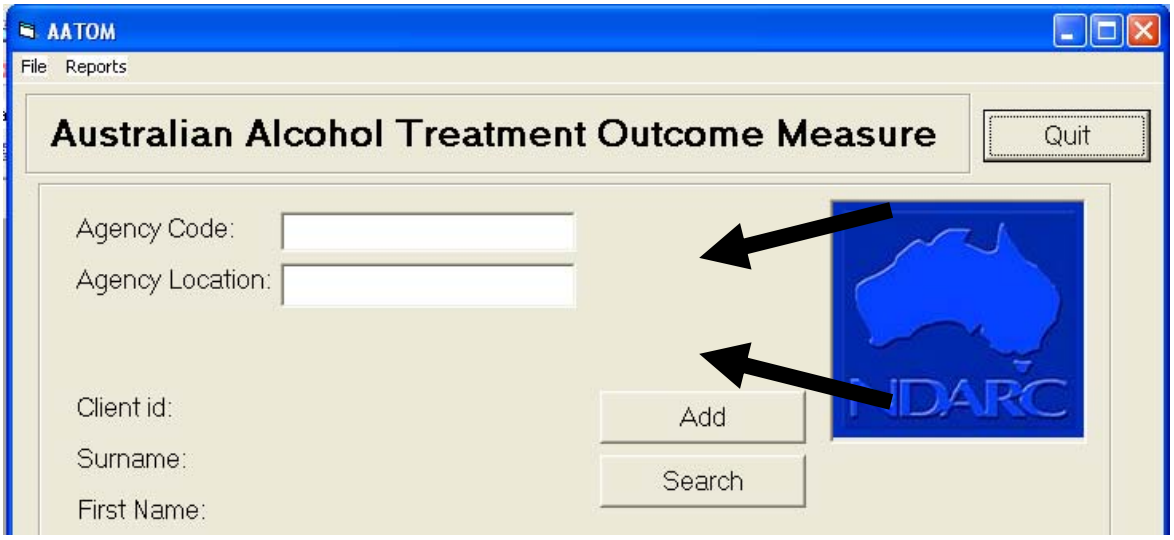
2. INSTALLATION

In order to install this program you must first create a folder. It is suggested to use the 'program files' directory and then establish an 'E-AATOM' subdirectory. So, for example creating the folder; "C:\Program Files\E-AATOM".

Now copy the E-AATOM.exe file from the supplied CD and paste it into the E-AATOM folder. At this point it is advised that you create a short-cut to this exe file and place it on your desktop for ease of use.

Now simply run the E-AATOM.exe file by double clicking it. This will immediately create some data files with the suffix '.txt'. These files, named 'data1.txt' and 'int1.txt' are created to enable the E-ATTOM to store data and can be ignored, but you should NEVER delete or try and open them.

From here if you are running the program for the first time you will be prompted to enter your Agency Code and Agency Location. These can be entered in the tabs shown below:



** The Agency Code and Location will be provided to your agency at the original AATOM-C training workshop if not already supplied by NSW Health. Those agencies collecting the National Minimum Data Set should have been previously allocated the relevant coding.

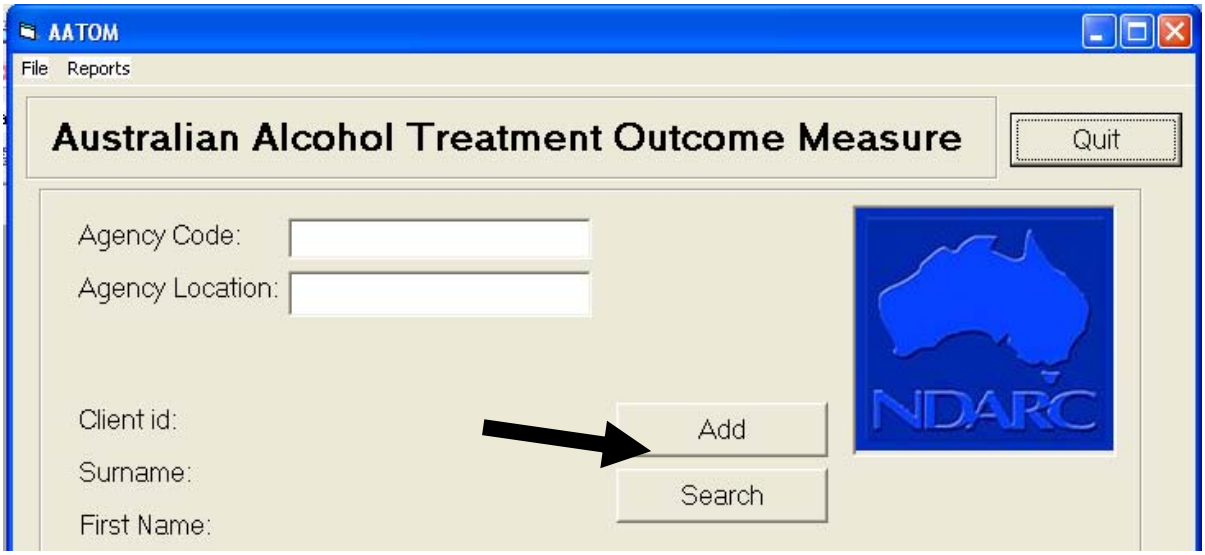
If it is still unclear what codes to use, please contact Peter Gates on 9385 0269 or email p.gates@unsw.edu.au

3. MAIN MENU

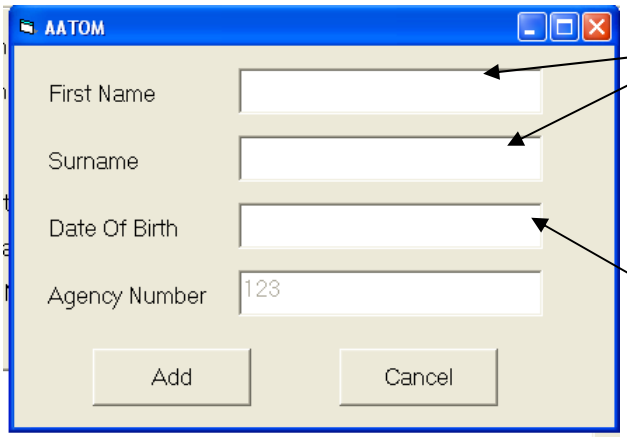
Be sure to enter the Agency Code and Location as a first step. At this first stage of running the program you will be faced with a mainly blank screen. It will be from this screen that the majority of options are available in terms of the program use. Initially however there will be no client interview entries. Hence the first stage in the program use will involve entering a new client. The other options available will then be explained in the subsequent points within this section.

3.1 Adding a new client ('Add Button')

Click the "Add" button as shown below. This will open up a new window where you can enter the first name, surname and date of birth. This process is explained below.



After pressing the 'Add' button, the following box appears.



This gives you the option to enter the first name and surname of the client. This is done so that each individual client interview file can be later recognised by client name.

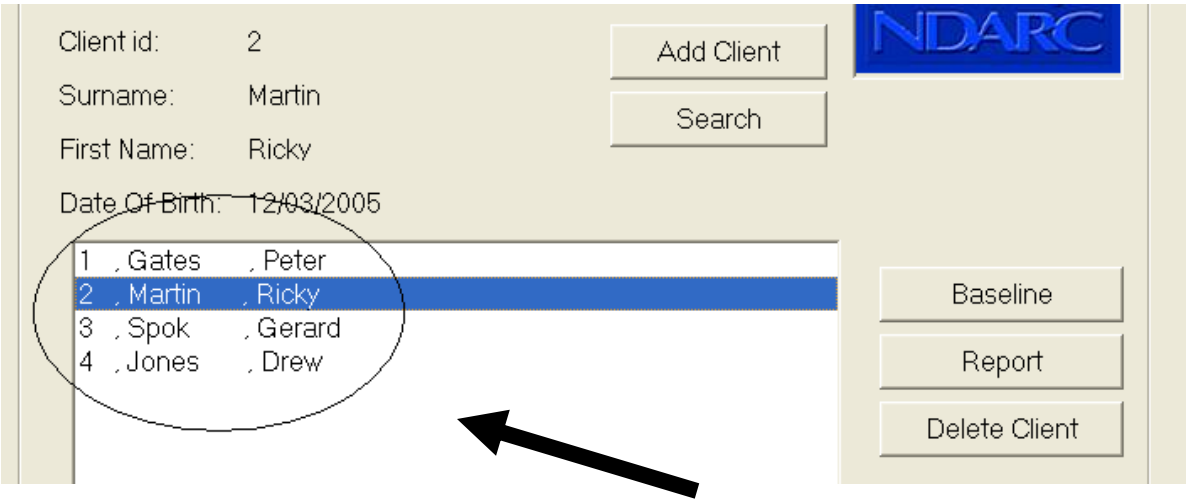
In addition, the client's date of birth must be entered. This can be entered in any of the following formats;

dd/mm/yy	dd/mm/yyyy	d/m/yy
dd mm yy	dd mm yyyy	d m yy

You will note that the Agency Number is slightly shaded or "locked" in and can not be re-entered.

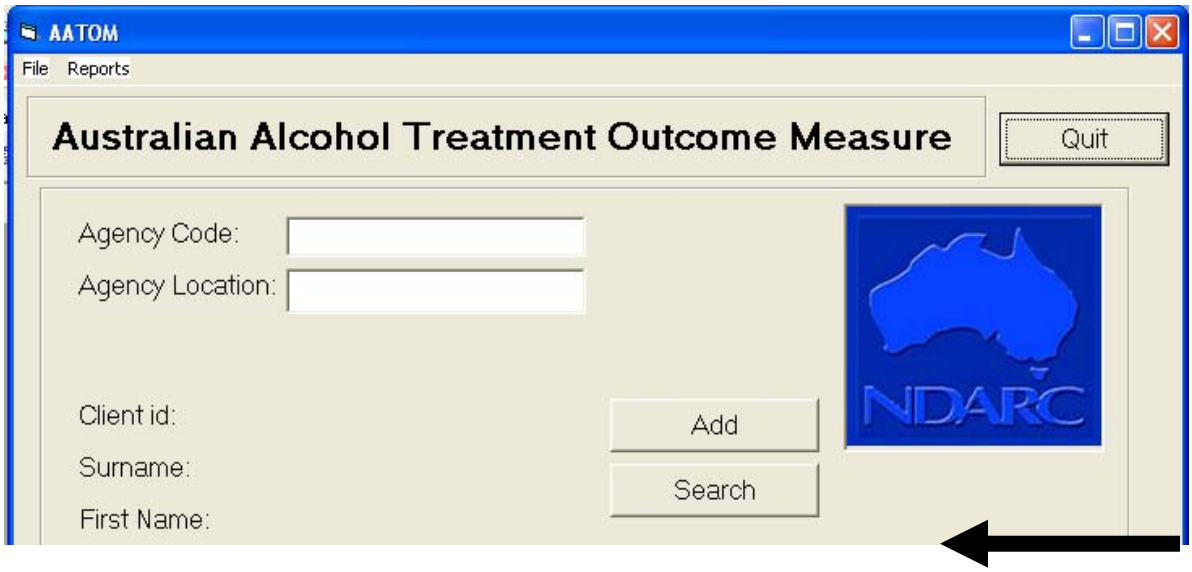
3.2 The Client List

Once a client has been added into the E-AATOM system they will appear in the main screen box as circled below. This list shows the client's ID number, followed by surname and finally first name. In order to start an interview or view a report for a particular client, they must first be selected from the list. In the example below, Ricky Martin has been selected.



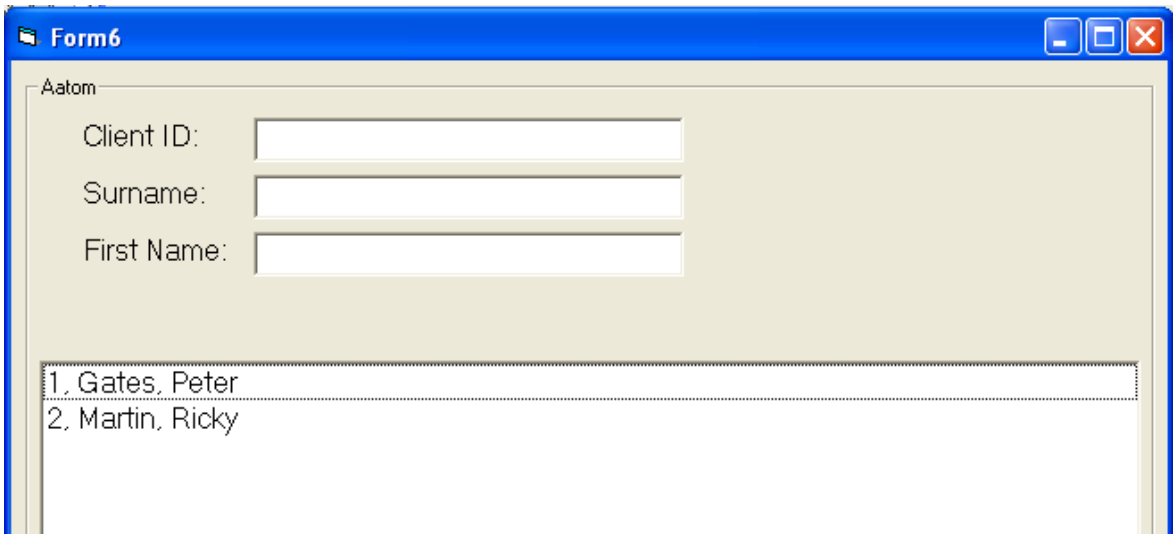
3.3 Searching for a previously entered client ('Search button')

In order to locate a certain client from previously completed interviews, click the "Search" button as shown below:



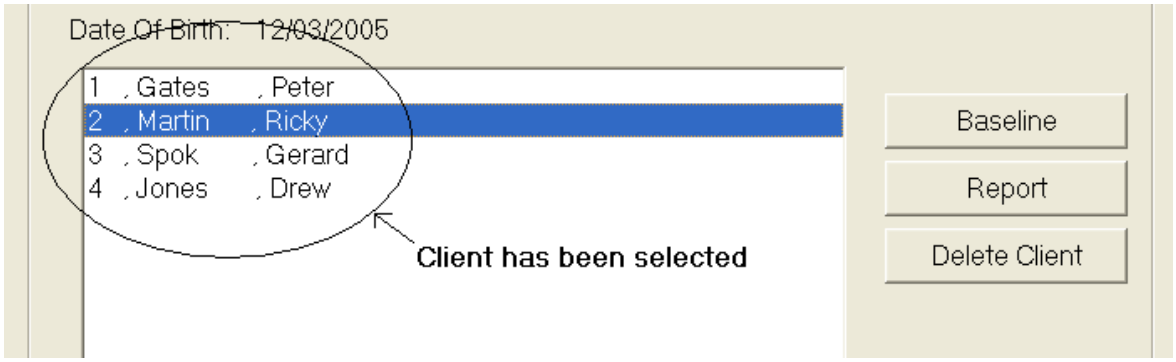
Doing this will bring you to the screen over the page. From this screen it is possible to enter in the missing client's ID number (a number automatically generated by the computer, starting from 1), surname or first name. As you enter any one of these options the number of clients listed will be filtered and soon you will be left with the option of double clicking

on the appropriate client. This will bring you back to the main screen with the selected client highlighted.



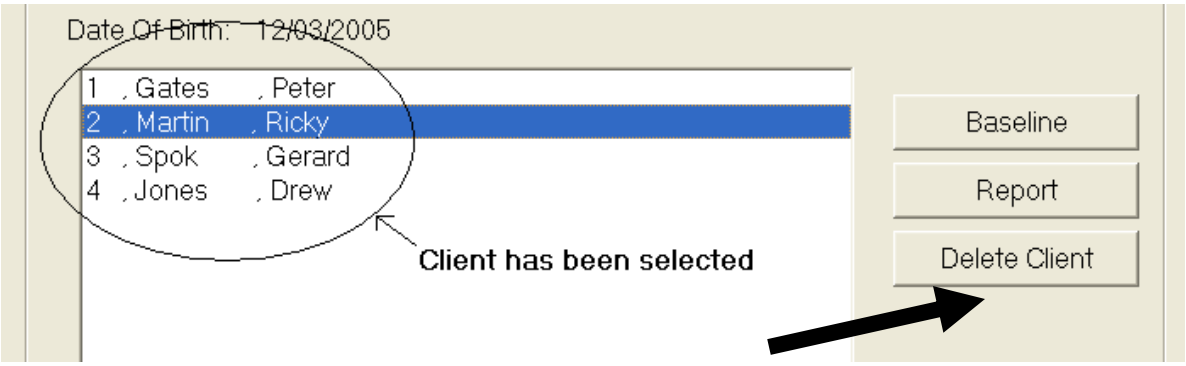
3.4 The Baseline Interview button

The buttons indicated below appear on the main screen and are where the action begins. The AATOM-C is designed to be a follow up tool and clients are re-interviewed three to nine months later. When a client is being interviewed for the first time, the "Baseline" button is selected in order to begin the first interview. Subsequent to that, follow up interview buttons will become available to proceed to follow up interviews. These buttons are not in operation for this edition of the E-AATOM manual.



3.5 Deleting a client ('Delete Client' Button)

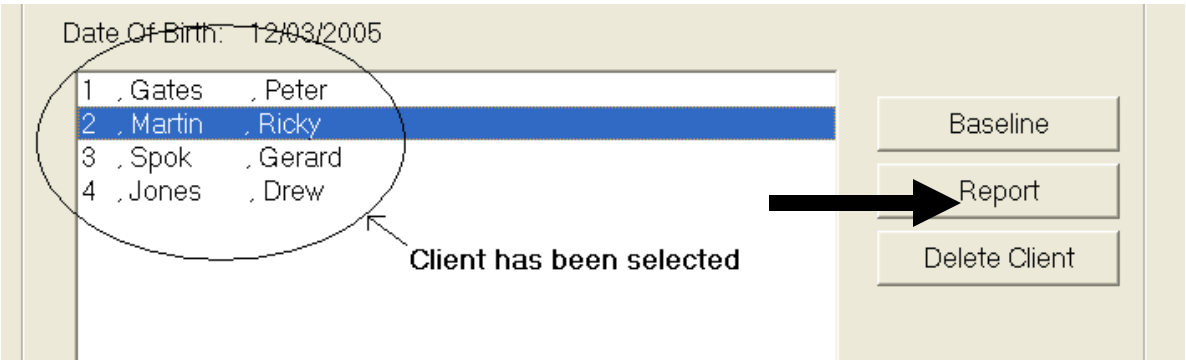
If a mistake is made when entering the details of the client (i.e. the wrong date of birth is entered), the client file can be erased. To delete a client, simply select the client from the client list and click on the 'delete client' button. You will then be given the option of opting out of the deletion or continuing by clicking the 'yes' (for deletion) or 'no' (for cancelling) as shown below.



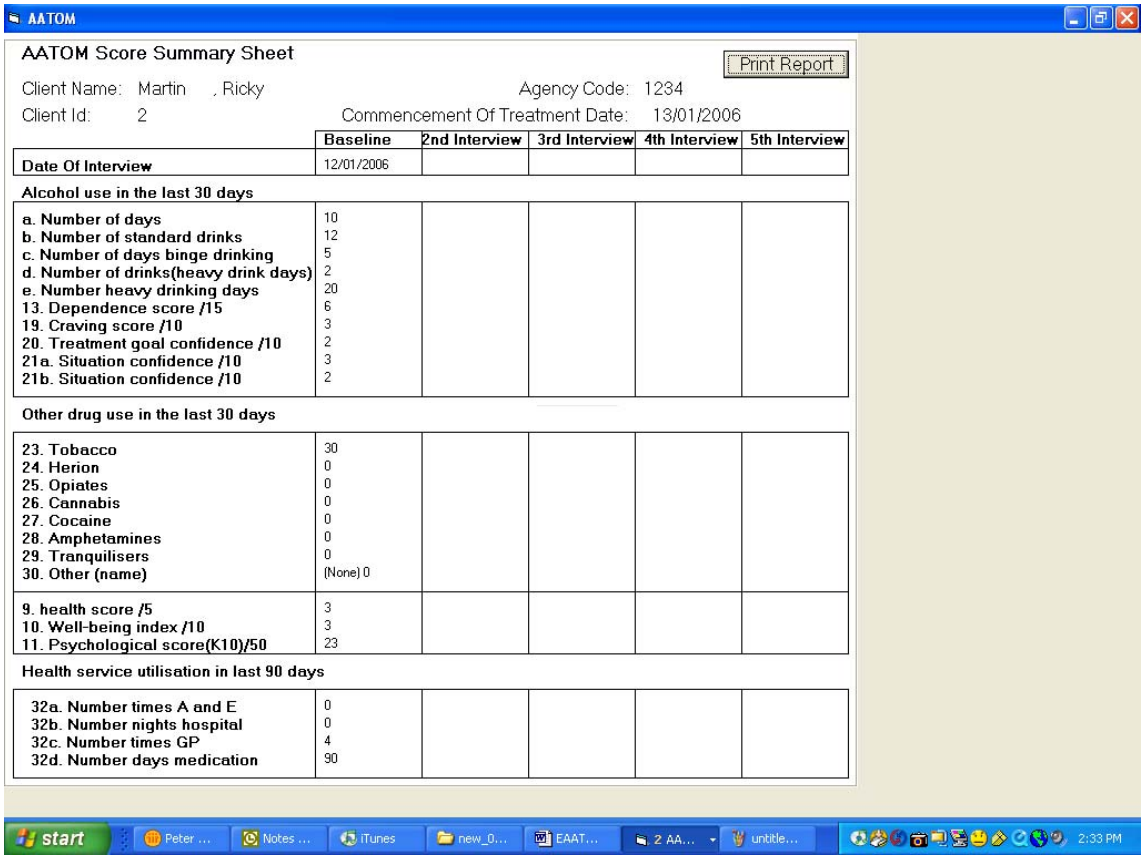
This prompt option will help protect against accidental deletion of a client's data. However, all is not lost if accidental deletion occurs, for the recovery procedure please email drewjones@hotmail.com.

3.6 The 'Report' Button

In order to produce an electronically generated report of the client's previous interview findings double click on the 'Report' button shown below. (Remember that a client will need to have been selected from the client list in order for this to produce any results).



By double clicking this button, the report screen shown overleaf will be generated for the particular client.



Baseline results are in the left hand column with follow-up data proceeding in the right hand columns.
In the example the follow up questionnaires have not been completed and are left blank.

You can see that in the top right hand corner there is the option to print the report if your computer is connected to a printer. The numbers on the far left refer to the items in the questionnaire that the results are drawn from. Short descriptions, such as "treatment goal confidence" are provided so that the numbers in the columns have a little more meaning. These are described in greater detail below;

"Number of days binge drinking" This refers to the number of days (in the 30 days previous to the interview) that the client had more than 5 (if female) or 7 (if male) standard drinks in the day.

"Number of drinks (heavy drinking days)" This refers to the number of standard drinks that the client had on days when he/she would drink much more than usual (in the 30 days previous to the interview).

"Dependence Score" This refers to the Severity of Dependence (SDS) score. The SDS is a score out of 15 where higher results indicate more severe dependence to alcohol.

"Craving Score" This refers to a number from 0 to 10 indicating how much the client was craving/desiring alcohol at the time of interview. Higher scores indicate a more uncontrollable craving.

"Treatment goal confidence" This refers to a score from 0 to 10 in terms of how confident the client feels in achieving their goals of treatment. Higher scores indicate a client is more confident in achieving treatment goals.

"Situational confidence (a)" This indicates how confident (again from 0 to 10) the client is of achieving their treatment goals in an imagined situation where they would be feeling depressed, anxious, irritable or stressed. Higher scores again indicate greater confidence.

"Situational confidence (b)" This indicates how confident (again from 0 to 10) the client is of achieving their treatment goals in an imagined situation of feeling happy or when someone is offering to buy them a drink. Higher scores again indicate greater confidence.

"Health score" Refers to a score from excellent (1) to poor (5) regarding the client's general health at the time of interview. Higher scores indicate poorer health.

"Well-being index" Refers to a score from 0 to 10 regarding the client's attitude toward their life in general. Higher scores indicate a more positive feeling.

"Psychological score" Refers to the Kessler 10. An index of psychological distress scored from 10 to 50. Higher scores indicate greater levels of psychological distress.

"Number of times visit A and E department" Refers to the number of times in the 90 days previous to interview that the client was admitted to hospital via the Accident and Emergency Department.

"Number of night hospital" Refers to the number of nights in the 90 days previous to the interview that the client spent in a hospital bed whether or not as an admitted patient.

"Number times visit GP" Refers to the number of times in the 90 days previous to the interview that the client had seen a GP (including when in treatment).

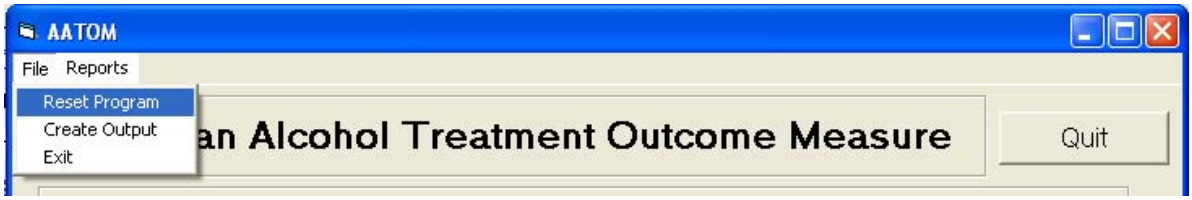
"Number day's medication" Refers to the number of days in the 90 days previous to the interview that the client had taken any kind of prescribed medication.

The report can be used as a quick reference guide to the psychological and physical state of the client in terms of their alcohol use, and be kept within the client's case management file.

To print the report, simply click the 'Print Report' button, as shown below.

3.7 The 'File' Menu

The 'File' menu is located at the far top left corner of the main screen. Clicking on the word 'File' will produce a pull-down menu as shown below.



This menu gives three options; 'Reset Program', 'Create Output' and 'Exit' (closes the program).

3.7.1 Reset Program

Clicking on this option will erase all current data and take the program back to the state it was in before it was ever used; hence 'resetting'. This is not something that should be done lightly and requires a password to activate. Once the option to reset is selected a further screen will prompt the user for this password.

The password is "titanic" all in lower-case letters.

This option should only be used in the case were the user wishes to erase practice interviews or badly coded interviews etc. Be fore warned that this option will erase ALL data and not just the client that may be selected.

3.7.2 Create Output

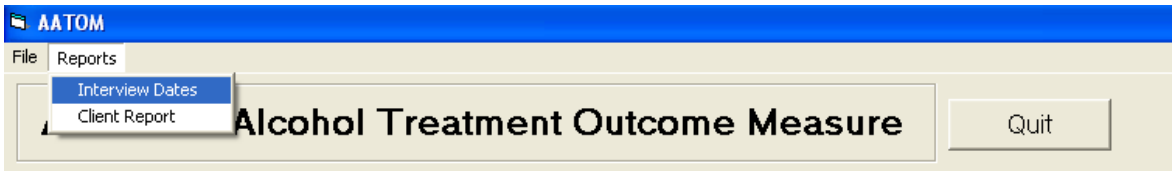
This option allows the user to export the completed interviews into 'text' documents. These files will be created into the same folder that houses the 'E-AATOM.exe' file. These newly created files will be named after the date they have been created and the interview number.

For example; "30112005int1.txt" will be generated if the create output option is used on the 30th of November 2005 and will be a text file containing the data for all time 1 (baseline interviews) that had been conducted before or on the date at the time of export. (This should not be confused with pressing the 'submit' button as explained in section 5.2).

This needs to be done for two reasons. Firstly, on the 21st of each month, completed interviews should be emailed to p.gates@unsw.edu.au in this text format (see the AATOM manual). Secondly, the agency might wish to then open the text documents using a statistical program such as SPSS or Microsoft Excel. This process is explained in Section 7.0.

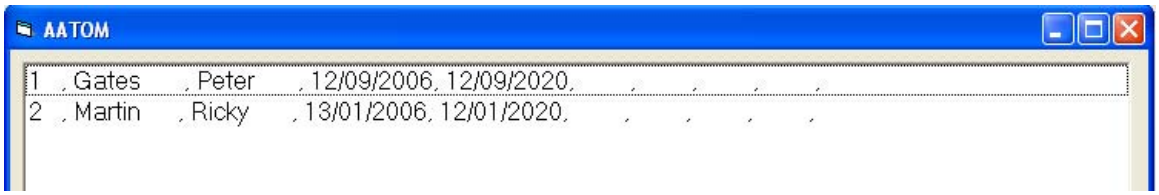
3.8 The 'Reports' Menu

The 'Report' menu is located in the top left corner of the main screen and appears next to the 'file' menu. Clicking on the 'Reports' will open another pull-down menu containing 'Interview dates' and 'Client Report' as seen below.



3.8.1 Interview Dates

Clicking on the interview dates option will bring the user to a listing of each client and the dates of completed interviews, as seen below;



The numbers in the far left correspond to the client number, followed by the surname and first name of each client. Following this, if an interview has been completed, the date of treatment commencement will be shown, followed by the date of any completed interviews. Any incomplete follow up interviews will be left blank and shown as incomplete.

In this way the user can get a picture of where clients are at for follow-up interviews. This may help with keeping the client registrar organised (see AATOM-C manual).

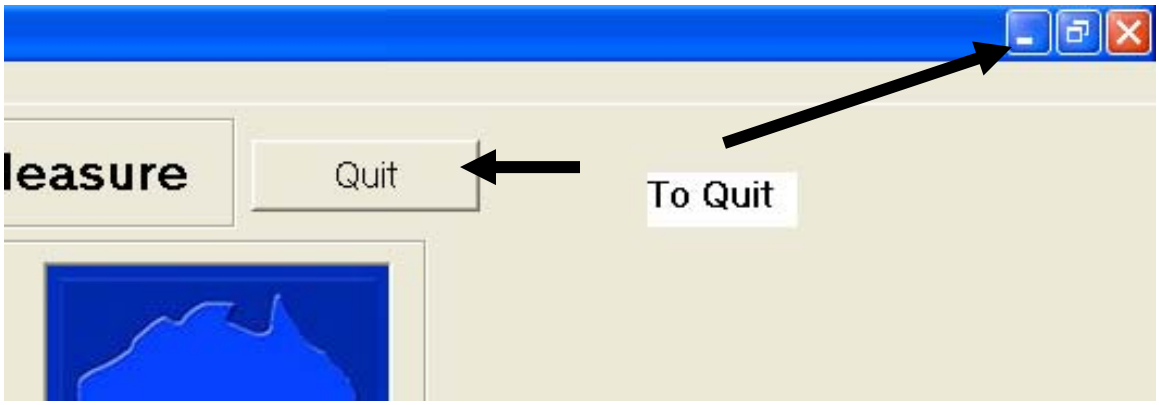
To return to the main screen simply click on the red check box in the top right, or the click the 'Close' button.

3.8.2 Client Report

After selecting a client from the client list, clicking on the client report option from the "Reports' menu will produce the electronic report of the client's previous interviews (see section 3.6).

3.9 Quitting the E-AATOM

In order to quit out of the main screen simply press the button labelled 'Quit' or press the red check button (highlighted overleaf) found in the far top corner of the main screen. Quitting the E-AATOM can be done at any time, even when in an interview. If the user is currently in the middle of an interview pressing the red check button highlighted overleaf will terminate the interview and erase or cancel any of the data entered.



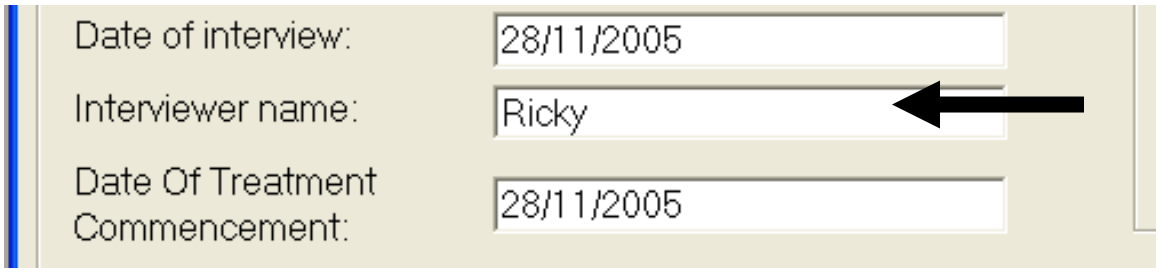
4.0 CONDUCTING THE INTERVIEW

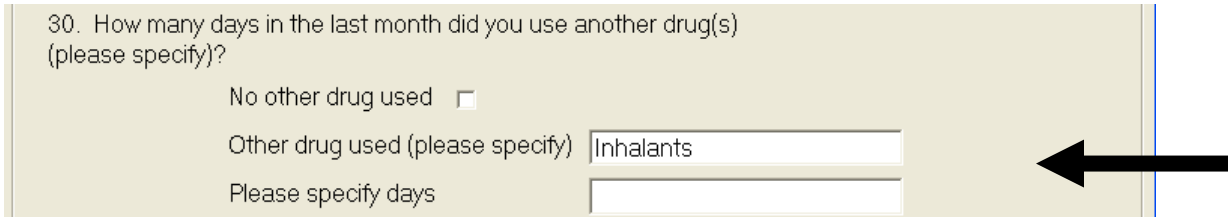
To begin interviewing simply select the 'Baseline' button (see Section 3.3). In terms of how the interview is conducted the user should follow the directions in the AATOM manual. There are no differences in the essence of the paper version and electronic version of the AATOM. Hence, conducting the interview should be done in the same way. However, the method of recording the client's responses is entirely different.

When conducting the interview you will be faced with different methods of entering data. The possible choices will be string variables, dates, check boxes, drop down menus and numbers. Each is explained in its different uses in the following sections.

4.1 String Variables

There are a few boxes that require the user to enter string variables in the answer boxes. String variables are simply those that require words to be spelt out just like any typing in a document. Two examples are shown below.

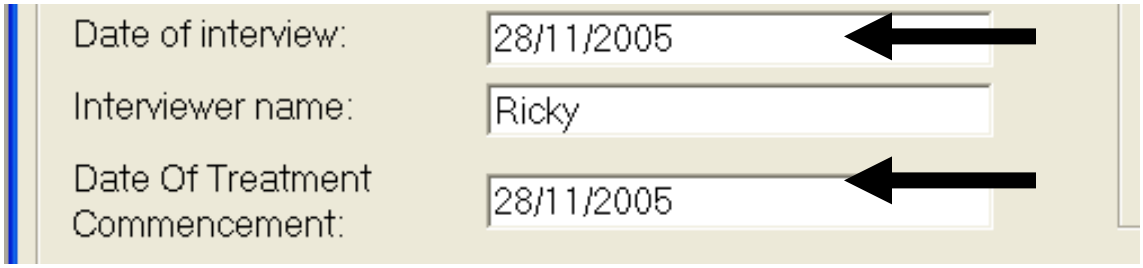




These variables are not case sensitive and can include numbers. This could be useful when interviewers share the same name, as in 'Ricky' and 'Ricky2' as possibilities in the first example shown above.

4.2 Dates

There are several instances during the interview that require the user to enter in a date. A couple of examples are shown below.



The E-AATOM will recognise several formats of dates. Any of the following will be accepted.

dd mm yyyy In this case the day, month and year are separated with the use of the spacebar.

dd mm yy Of note in this example is that the year will be accepted using two digits. If the first 'y' is a '0' or just left blank then the year will be prefixed with '20' as in yy = 05 = '2005'. So long as the first 'y' is not a '0' the year will be prefixed with '19' as in yy = 80 = '1980'.

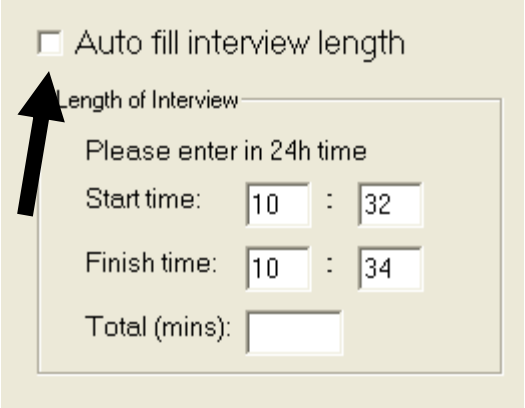
dd/mm/yyyy This will be recognised in the same way as if spaces were used to separate day from month and month from year.

d/m/y Of note here is that only one digit is need be used to enter the date. This will be the case when the day and month is a single digit and the user is referring to a year prefixed with '20'. For example d/m/y = 5/9/3 = 05/09/05.

At no time will the E-AATOM accept a full stop ('.') to separate day from month and month from year. Doing so will result in an error message and will need changing.

4.3 Check Boxes

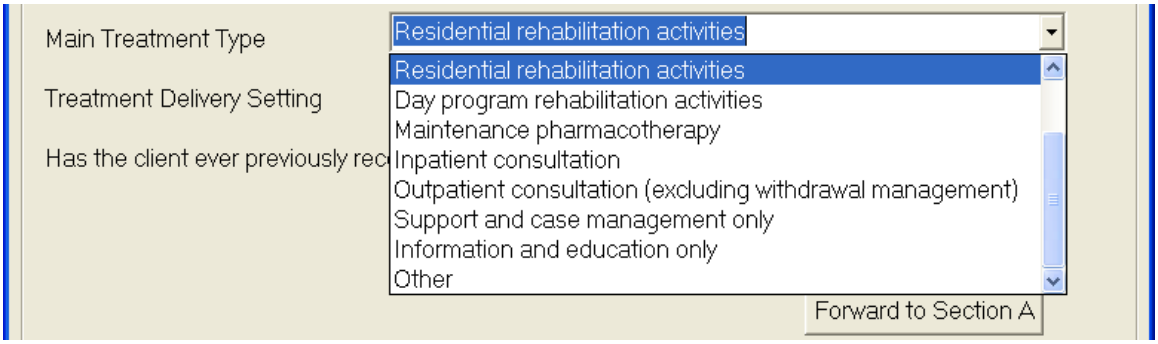
Only a few check boxes exist throughout the interview. An example is shown below.



The check-box is the small white box seen to the left of the words "Auto fill interview length". In the example shown the box is not checked and left blank. In every case the function of the box is explained immediately to its left or right. In the example shown, checking (or clicking on) the box will cause the E-AATOM to automatically fill in the time the interview takes by using the computer clock. When a box is checked a small tick (☑) will appear in it. In most cases the boxes will be checked as the default status.

4.4 Drop Down Menus

The majority of items in the interview are answered with the use of the drop down menu. In each case the menu is accessed by clicking on the small down arrow (▼) to the right of the answer box. The example for answering the client's main treatment type is shown below.

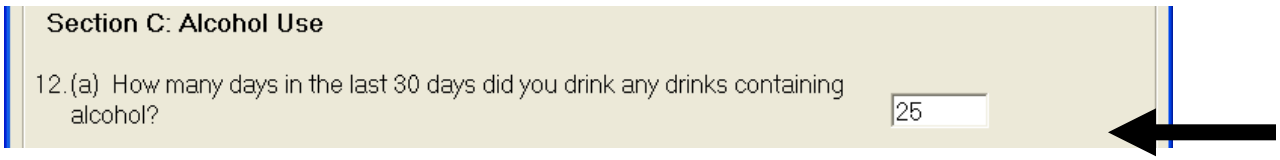


Once the menu is 'pulled' down the user can then select the appropriate option by simply scrolling down the list and clicking the appropriate response.

For each drop down menu, the user can simply type in the answer as a string variable (see section 4.1) and if the spelling and case of the letters matches an option in the drop down menu it will be automatically selected. So in the example above, the user could have typed the words "Residential rehabilitation activities" instead of opting to use the drop down menu.

4.5 Numbers

Many items request the user to respond by entering a certain number (usually an amount of days etc.). An example is shown below.



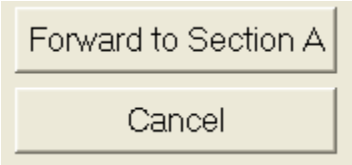
In most cases the number entered needs to be consistent with the line of questioning. In the example above, the program will be expecting the user to enter a number from 0 to 30 corresponding to a number relating to the last 30 days. If a response is given outside this range the program will display an error message.

Every question in the E-AATOM has a code (a number) that is recorded as the response. Even when the method of recording responses is a drop down menu, what appears on any exported data (see Section 7.0) will be a code. The codes are shown on the paper version of the AATOM next to each response box. It is possible to enter these codes (if you are sure that they are correct) instead of using the alternative response methods. This is not advised however as it reduces quality control.

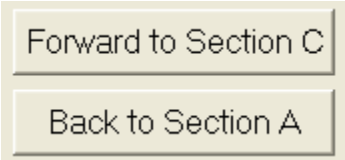
5.0 NAVAGATING AND SUBMITTING

5.1 Forwards and Backwards

When conducting the interview only one section can be entered at a time. It is necessary to move forward to new sections in order to proceed to the interviews completion. To begin there is only the option to move forward ('Forward to Section A') or to cancel (exit the interview) as shown in the box below.

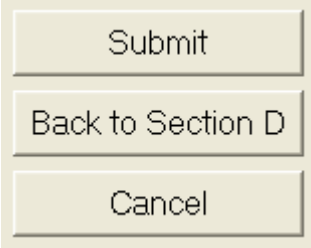


From then, however, there is the option to go back to previous sections. This can be done if answers need changing. Moving backwards and forwards through the interview is done one screen at a time and the previous and proceeding sections are always described as in the box below.



5.2 Submit or Cancel

When the interview is at its final screen the option to proceed forward is replaced by a 'Submit' option and the 'Cancel' option then becomes available.



By pressing the 'Submit' button the interview will be saved and be shown as completed. Be sure to have answered everything correctly because once this option has been taken, the answers are "locked" in and can not be changed. Any data that has been submitted will then be included when the user choses to create output, as explained in Section 3.5.2.

By pressing the 'Cancel' button the interview will be terminated and all data lost. This has the same effect as pressing the red check button in the far top right hand corner at any time during interview.

Once submitted, or cancelled, the user is taken back to the main screen. This time when the client is selected the option to conduct the interview is replaced with the option to review the interview. Reviewing an interview is a "look but don't touch" process and any changes made are not accepted in the same way as before the 'submit' button was pressed.

6.0 ERROR MESSAGES AND TROUBLESHOOTING

Whenever the user is ready to proceed to the next set of questions, the user will press the 'forward' button as described in Section 5.1. At this time the program will detect if there is any faulty data entry and will display an error message. If this is the case some changes must be made before continuing as explained in the following sections.

6.1 "Please enter"

If you are faced with a message that begins with the words "Please enter" this refers to an answer box that has been left blank. The user will be referred to which question has been left blank. You will need to fill it in before continuing.

6.2 "Type Mismatch"

If you are faced with a message that contains the words "Type Mismatch" this refers to an answer box that has been filled in using an incorrect method. Section 4 of this manual covers the different types of data entry available. The most common mistakes would be using letters when the program is expecting a date, or using full stops to separate days and months and years in a date.

6.3 "Please specify" or "Please answer"

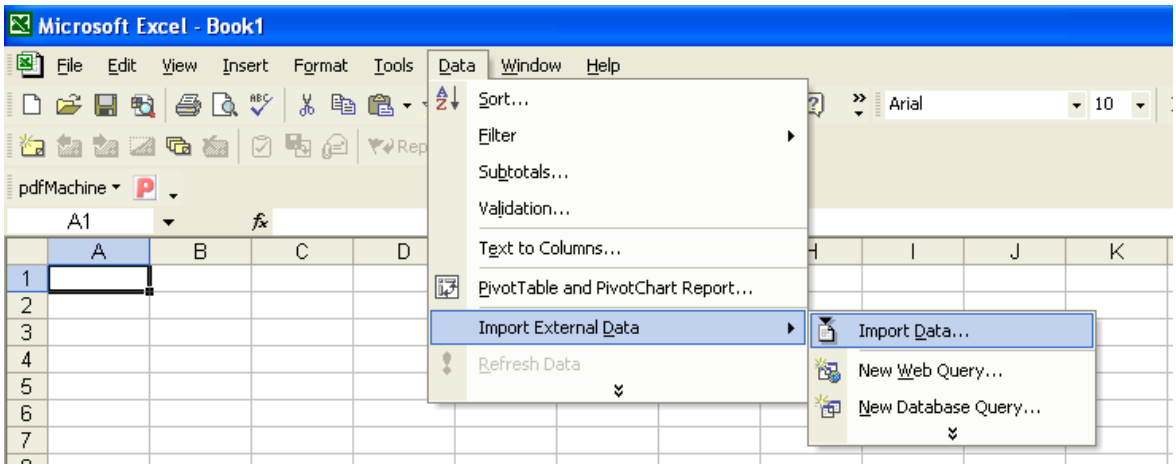
If you are faced with a message that contains the words "Please specify" or "Please answer", this refers to an answer box containing numbers (see section 4.5) whereby a certain number is outside an expected range. For example, a common is entering the amount of days in the last 30 days using the number '31'. Although some months have 31 days, the scope of this interview refers only to the past 30 days and as such the only acceptable numbers are limited to between 0 and 30.

6.4 Troubleshooting

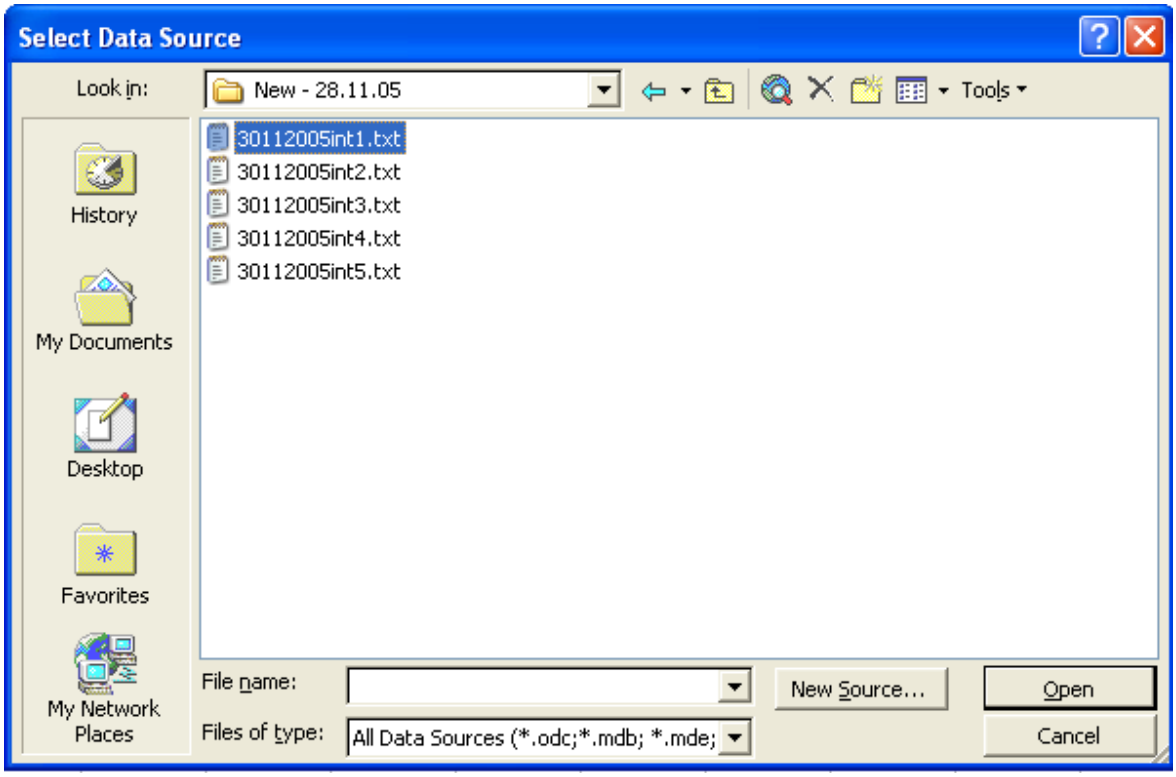
If you are ever faced with an error message or problem that makes no sense to you, there is always hope! Tech support is available by calling Peter Gates on 9385 0269 in normal working hours or by emailing p.gates@unsw.edu.au or drewrjones@hotmail.com.

7.0 IMPORTING DATA INTO EXCEL

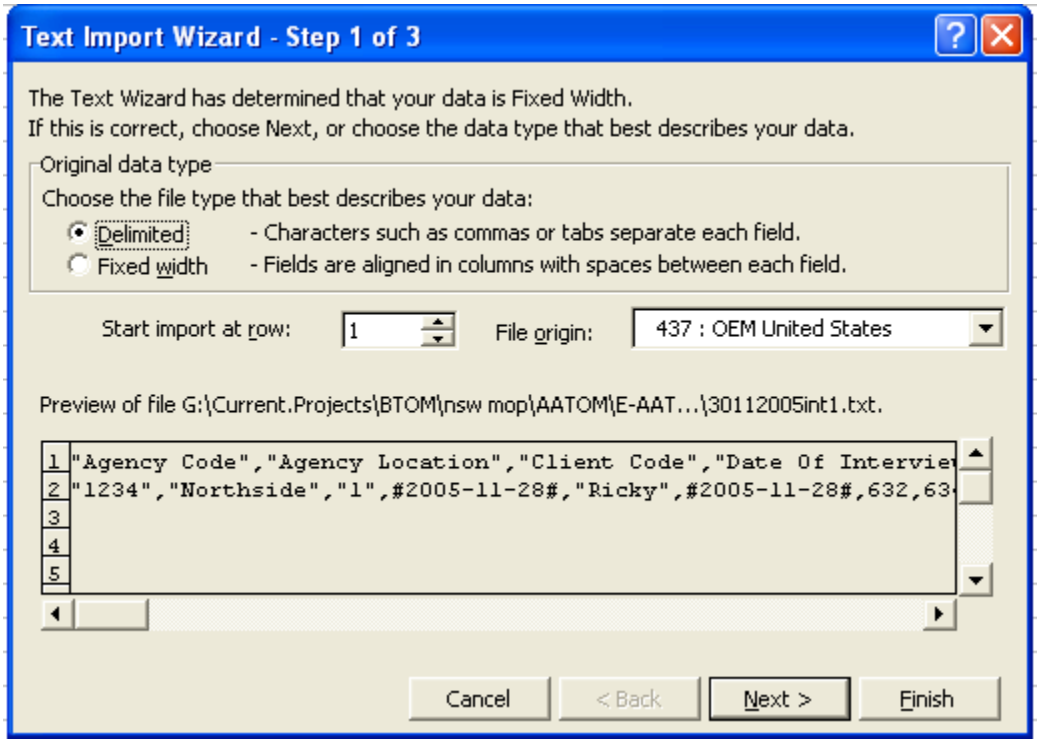
Once an interview has been submitted and converted to a text file it can then be exported into Excel for further analysis. To do this, open a blank Excel spreadsheet; select 'Import External Data' from the 'Data' menu and then select 'Import Data'.



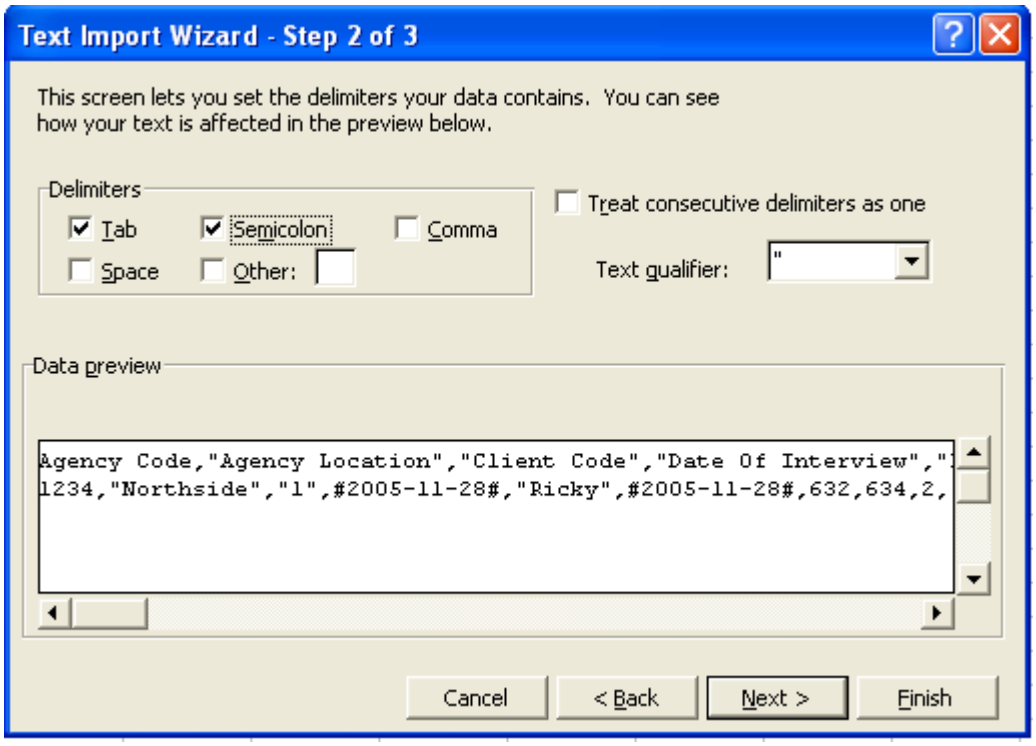
Following that, simply locate the text file from your computer and double click on it as below.



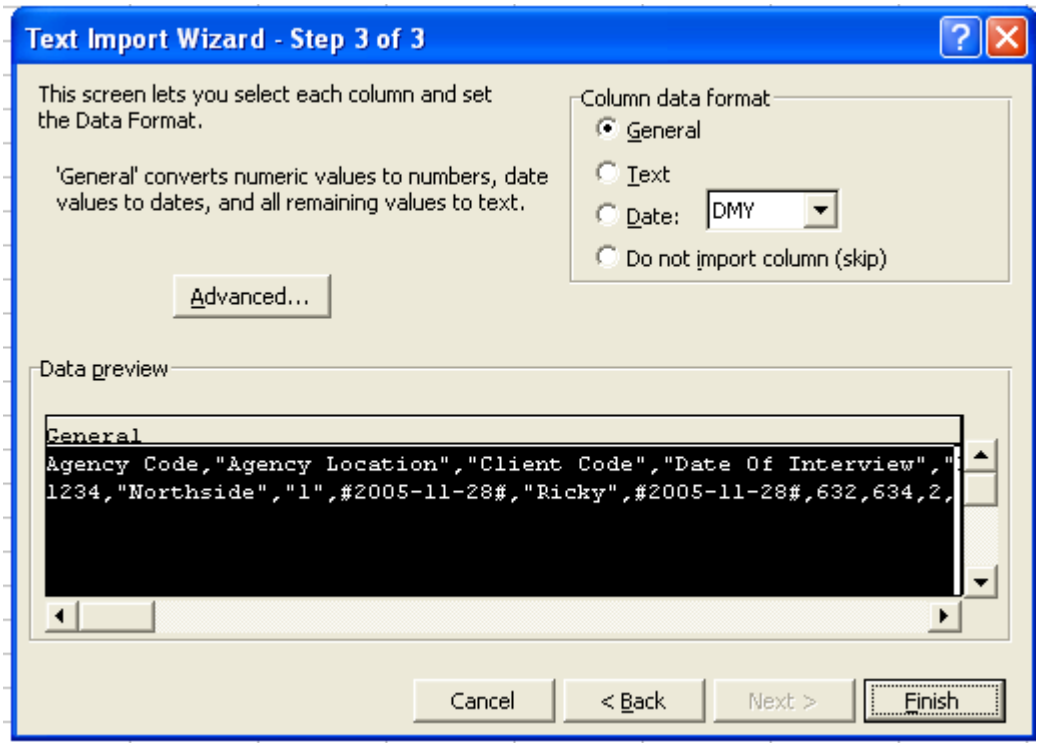
When the next screen appears select "Delimited" and click "Next".



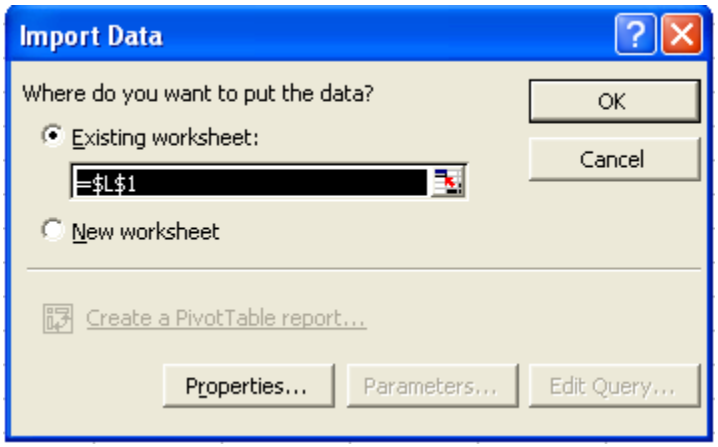
Then select "Semicolon" and press "Next".



Then press "Finish".

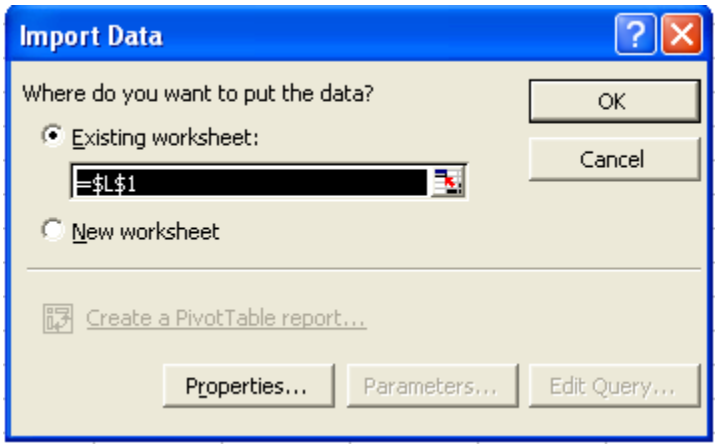


Finally press "OK" to put the data into the existing worksheet.



This will result in the columns filling with the individual data items. The first row shows what each dataset in the column is referring too.

To conduct further analysis on the data please consult a Microsoft technician or see the Excel 'help' file for details.



This will result in the columns filling with the individual data items. The first row shows what each dataset in the column is referring too.

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