# Alcohol and Drug Outcome Measure

## Refinement and validation of ADOM Part B questions

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# Executive summary

This report describes the results comparing psychometric testing of the revised questions of Part B, Alcohol and Drug Outcome Measure (ADOM) with the original question psychometric test results of the same outcome measure (Pulford, J., Deering D. E., Robinson G., 2010). This report aims to inform decisions on a revised ADOM suited for use across New Zealand community addiction services. The specific objectives of the research were to undertake psychometric testing of the revised questions of Part B of the ADOM, to compare the results with the psychometric testing of the original ADOM Part B; and, to make recommendations to the New Zealand Alcohol and Drug sector on improvements to the ADOM.

The questions were revised through a series of nine focus groups comprising of clinicians and clients examining the clarity, accessibility and intent of Part B questions.[1] Based on recommendations from the focus groups, questions were refined in order to improve clarity and wording and then tested to ensure they were robust. It is this testing that is the focus of this report.

The study methodology was divided into two stages. Stage 1 compared the Revised ADOM Part B to existing psychometrically sound instruments. Stage 2 assessed inter-rater reliability of the ADOM through scenarios and clinician input. The aims of the psychometric testing were to assess concurrent validity and inter-rater reliability of the Revised ADOM Part B. Concurrent validity was tested by using Spearman's rank correlation coefficient (r) for continuous data to assess the comparable parts of the Revised ADOM Part B, the TOP and SF-36. Inter-rater reliability was tested using the free-marginal Kappa coefficient for clinicians rating clinical scenarios using the Revised ADOM Part B. For stage 1 of the project, 40 clients were recruited. For stage 2, 8 clinicians agreed to participate.

The psychometric testing indicated that the Revised ADOM Part B has improved the psychometric properties of the original ADOM Part B. The Revised ADOM Part B has potential as a measure of AOD-related psychosocial issues. Recommendations following this project include that:

1. the Revised ADOM Part B has improved psychometric properties and should be seriously considered together with the ADOM Part A, for use as a routine outcome measure across the New Zealand AOD treatment sector;
2. seven of the eight questions of the Revised ADOM Part B should replace the questions of the original ADOM Part B;
3. the AOD treatment sector is trained to discuss and address criminal activities with clients as part of their treatment package; and that
4. an additional question on recovery should be included as part of the Revised ADOM Part B and this question undergo further testing for validity.

[1] Unpublished report: Alcohol and Drug outcome measure – Part B: A report from nine discussion groups on the clarity and accessibility of the seven questions in Part B along with recommendations for improvement.

# Introduction

The Alcohol & Drug Outcome Measure, the ADOM, is a two part monitoring instrument designed for use within the New Zealand alcohol & other drug (AOD) treatment sector. The measure was developed in 2008, following the initiative to support recovery through promoting and facilitating an outcomes-focused culture in the mental health and addictions sector – the MH-SMART (Mental Health - Standard Measures of Assessment and Recovery) initiative. Part A of the instrument is designed to measure change in alcohol & drug use following treatment whilst Part B is designed to measure recovery, physical and psychological health and lifestyle changes.

This report presents the findings of a project commissioned by Te Pou aimed at validating revised questions forming Part B of the ADOM. The purpose of the revised questions is to improve the results of the psychometric tests of the original Alcohol & Drug Outcome Measure Part B. This project seeks to test whether question revision does improve the psychometric properties of the original questions.

This project was informed by earlier studies, in particular the Alcohol and Drug Outcomes project (ADOPT) (Deering et. al., 2004), the Alcohol and Drug Outcomes ProjecT (ADOPT) Part II (Deering et. al., 2009) and the ADOM Part B recommendations for improving the questions.[2] The first 2 studies resulted in the development of the ADOM and reported on the psychometric properties of Part A and Part B. The 2012 study commissioned by Te Pou resulted in recommendations for improvement of Part B in the form of revised questions, following a series of nine discussion groups.

This report describes the results of psychometric testing of the revised questions for Part B of the ADOM. The findings are compared to the psychometric testing of the original questions for Part B of the ADOM. This report aims to inform decisions on a revised ADOM suited for use across New Zealand community addiction services.

Project objectives include:

- to undertake psychometric testing of the revised questions of Part B of the ADOM;
- to compare the results of the revised questions with the original questions of Part B of the ADOM;
- to make recommendations to the New Zealand Alcohol and Drug sector on an improved revised version of the ADOM Part B.

The project was commissioned by Te Pou and conducted by the Community Alcohol and Drug Services in Auckland, Waitemata District Health Board.

Ethics approval was granted by the Upper South A Regional Health and Disability Ethics Committee (URA/12/EXP/028) (See Appendix 1).

[2] Unpublished report on the from nine discussion groups on the clarity and accessibility of the seven questions in Part B along with recommendations for improvement. The National Centre of Mental Health Research, Information and workforce Development.

# Method

The project methodology sought to provide an assessment of concurrent validity and inter-rater reliability of the revised questions of the ADOM Part B. It involved a 2 stage approach. In stage 1 the Revised ADOM Part B was compared to existing psychometrically sound instruments. In stage 2, inter-rater reliability was examined with a number of clinicians.

The aim of the psychometric testing was to assess concurrent validity (comparability with existing, psychometrically sound instruments) and inter-rater reliability (reliability in the way the questions are asked by having the questions asked more than once by different clinicians). The study replicates psychometric testing conducted on the original version of the ADOM (Pulford et al, 2010).

## Study setting

The study took place in an outpatient AOD treatment service within CADS, Auckland. CADS is a specialist regional alcohol and drug treatment provider for greater Auckland through Waitemata District Health Board (WDHB). CADS are the primary providers of AOD assessment, treatment and recovery services across the Auckland region. At any given time, CADS services are generally engaged with approximately 5000 service consumers (Steenhiusen & Galea, 2012).

CADS services employ clinicians with professional roles of psychiatrists, medical officers, nurses and Allied Health professionals who provide a range of specialist interventions for people with alcohol or drug abuse or dependence. The staff work in partnership with primary care providers, other non-governmental organisations, mental health services and other health and social care providers, to deliver evidence based treatment for the alcohol and drug 'in need' population in Auckland. Treatment is recovery based and holistic reflecting the biological, cognitive and environmental dimensions of alcohol and drug problems (Steenhiusen & Galea, 2012).

The study was conducted in a busy and typical CADS outpatient unit – CADS West - a Counselling and Opioid Treatment Service. CADS West provides universal assessment and treatment for clients living with the West Auckland area (Steenhiusen & Galea, 2012).

# Stage 1: Concurrent Validity

## Procedure and recruitment

All clients attending CADS West over a week period, for assessment and treatment, were offered the opportunity to participate in the study. The opportunity was offered to all clients up to a point when participation reached the required sample size. The purpose of the study was clearly explained and defined to the clients by the research assistant. Clients were informed that not consenting to participate in the study did not impact on their treatment in any way. Also, clients were reassured that information collected would not be available to the treatment provider and would be kept confidentially and only be used for the purpose of research (See Appendix 2 and Appendix 3)

Clients consenting to participate in the study were referred to a contracted, independent research assistant within the same unit. Participation in the study occurred opportunistically whilst waiting to be seen by clinicians or following their treatment session as agreed with both client and clinician.

The questionnaires were completed by the research assistant in direct consultation with the client, within a confidential setting. Each question was asked as written and in order of lay-out (see Appendix 4). The participant was offered the opportunity to read the questionnaire alongside the research assistant verbally reading out each question. The research assistant and participant together completed answers to each question immediately following the question being asked.

## Sample size

The sample size required for the study was 40 participants, to allow for concurrent validity of approximately 5 participants per question in the Revised ADOM Part B (Cohen 1988).

## Comparative measures

The questionnaires consisted of demographic data, the Revised ADOM Part B and two comparative measures – the Treatment Outcome Profile (TOP), Sections 3 and 4; and the SF-36 Health Survey, Questions 4 and 5.

Sections 3 and 4 of the TOP measure criminal activity, and health and social functioning respectively over a 4 week period. The items for criminal activity in the TOP include, days of shop theft and drug selling; theft from or of a vehicle; theft from a person; residential and commercial burglary; fraud, forgery, and handling of stolen goods; and assault or other violence. Measures for health and social functioning in the TOP include, subjective rating of physical health (symptoms and being bothered by illness); psychological health (anxiety, depressive symptoms and problem emotions and feelings); quality of life overall satisfaction with relationships, social environment and general life situation), recorded using a 21-point scale (0, 'poor' to 20, 'good'); days of paid

work and attendance for education or training; period prevalence of acute housing problems (defined as formally homeless, sleeping rough or staying at a night shelter); and risk of home eviction (Marsden et al 2008).

Questions 4 and 5 of the SF-36 Health Survey were used for comparison. These questions are multiple response questions which comprise of seven yes/no options. The questions explore any difficulties encountered by the client, due to physical health or emotional problems at work or other regular daily activities.

### Analysis

Spearman's rank correlation coefficient (r) for continuous data was used to assess the comparable parts of the Revised ADOM Part B, the TOP and SF-36. The analysis is identical to that used in the original version of the ADOM (Deering et. al., 2009, Pulford et. al., 2010).

## Stage 2: Inter-rater reliability

### Procedure and recruitment

Recruitment for stage 2 of the project took place at CADS West. Eight clinicians working at CADS West were recruited to participate in stage 2 of the project. The process for recruitment involved the research assistant attending the team meeting to explain the purpose and nature of the project to clinicians. The day for research assistant attendance at the team meeting was selected by the team leader on the basis of convenience – that is, a meeting when high risk discussions were less prevalent allowing enough time for discussion on the purpose and nature of stage 2 of the project.

Following explanation on the purpose and nature of the study by the research assistant, a group of 8 clinicians volunteered to be recruited for the purpose of completing the Revised ADOM Part B against two clinical scenarios. Each clinician completed the Revised ADOM Part B for each scenario. Clinicians completed the Revised ADOM Part B simultaneously to prevent bias resulting from discussions among clinicians. No further facilitation was provided by the research assistant.

The scenarios were compiled by the project investigators and were based on presentations of typical clients attending CADS West. The level of complexity of the scenarios was average, generally considered to present as medium risk (see Appendix 5).

The completed Revised ADOM Part B forms were collected by the research assistant directly from the clinicians on completion.

## Sample size

A team of eight clinicians participated in the study. The clinicians worked at CADS West, the community unit from which clients were recruited for Stage 1 of the project. The cohort of eight clinicians was considered a suitable number for inter-rater reliability of the Revised ADOM Part B (Cohen, 1988). The sample consisted of 2 female clinicians and 6 male clinicians. All had at least 1 year experience in working within the AOD sector (ranging from 1.5 years to 13 years).

## Analysis

*Kappa* coefficient was used to assess the inter-rater reliability between clinicians rating clinical scenarios using the Revised ADOM Part B. The online *kappa* calculator (http://justrandolph.net/kappa/) was used to calculate *kappa*. The free-marginal *kappa* was selected given that clinicians were not forced to assign a certain number of cases to each category (Randolph, 2005; Warrens, 2010; Brennan & Prediger, 1981).

# Results

## Participants

A total of 41 AOD clients were successfully recruited and completed a baseline interview comparing the Revised ADOM Part B with the Treatment Outcomes Profile (TOP) and SF-36. Following the interview, one client did not want to be included in the study and requested for interview papers to be destroyed. Consequently data on 40 participants was analysed.

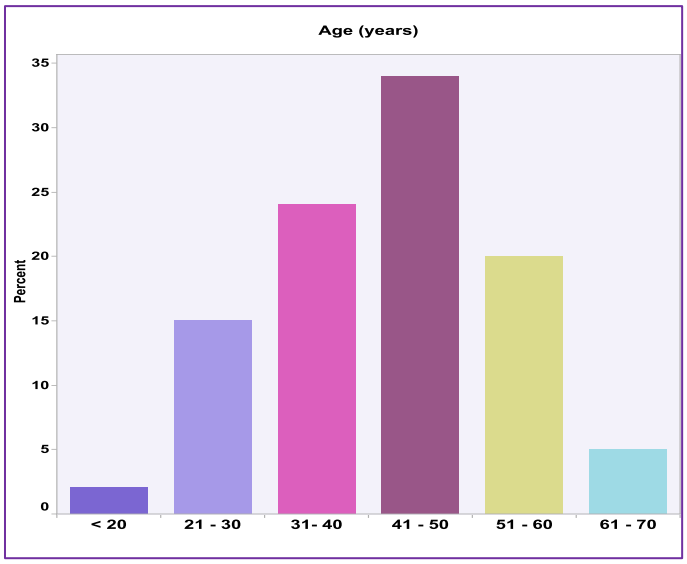
The table below shows gender and ethnicity of participants. The gender and ethnicity indicated in the table below are typical of the client group attending CADS West (Steenhiusen & Galea, 2012). Gender and ethnicity data indicate that there was no over-representation of any gender or ethnic group:

**Table 1. Participants by Gender and Ethnicity**

| Characteristic | | Number (n=40) | (Percent) |
|---|---|---|---|
| **Gender** | Male | 23 | (57.5%) |
| | Female | 17 | (42.5%) |
| **Ethnicity** | NZ European | 24 | (60.0%) |
| | Maori | 9 | (22.5%) |
| | Pacific Peoples | 2 | (5.0%) |
| | Other European | 2 | (5.0%) |
| | Other | 2 | (5.0%) |
| | Not specified | 1 | (2.5%) |

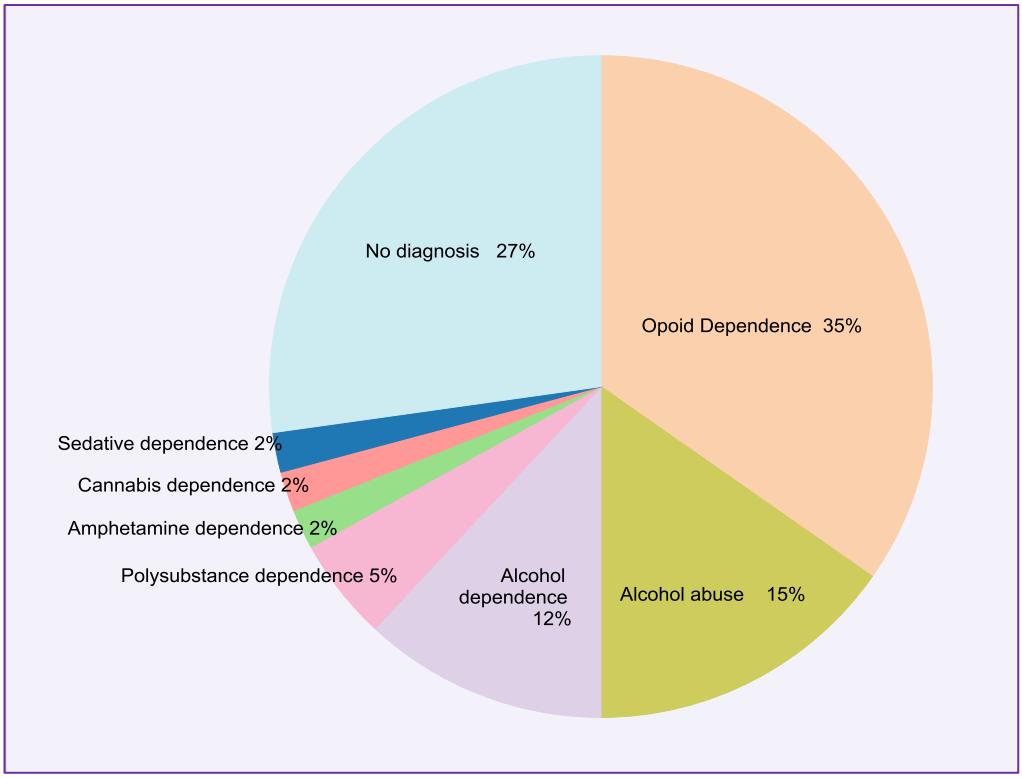
The majority were between 41 and 50 years of age. Once again this age group is typical of the majority of clients attending CADS West (Steenhiusen & Galea, 2012). There is no overrepresentation.

Figure 1. Participants by Age Group



The most prevalent diagnosis among participants was opioid dependence (35%), followed by alcohol abuse (15%) and alcohol dependence (12%). A number of clients were attending CADS West as part of their treatment program for opioid dependency through the Auckland opioid treatment service based within CADS West – hence, the high prevalence of opioid dependency. A significant proportion (27%) had no diagnosis. This group was likely to be still undergoing assessment.

Figure 2. Participants by Diagnosis




## Stage 1: Concurrent Validity

Correlations between the Revised ADOM Part B questions, Sections 3 and 4 of the Treatment Outcomes Profile, and Questions Four and Five of the SF-36 were calculated. The findings are presented in Table 2. The table also shows the correlations between the original ADOM Part B questions, the TOP and SF-36 questions. Appendix 6 gives the same table of correlations with the original and Revised ADOM Part B questions.

**Table 2. Correlations (Spearman's r) between Comparable Questions of the Original and Revised ADOM Part B, the TOP and SF-36**

| ADOM Measure | Comparable measure | | Original ADOM Part B | | Revised ADOM Part B | |
|---|---|---|---|---|---|---|
| | | | *r* | *p* | *r* | *p* |
| Physical health (Q12) | TOP | Physical health | -0.36 | <0.01 | -0.61 | <0.001 |
| | SF-36 | Other activities (Q4) | 0.53 | < 0.001 | 0.41 | <0.01 |
| | | Accomplished less | 0.38 | < 0.01 | 0.52 | <0.001 |
| | | Limited activity | 0.56 | < 0.001 | 0.65 | <0.001 |
| | | Performance | 0.53 | < 0.001 | 0.75 | <0.001 |
| Psychological or mental health (Q13) | TOP | Psychological status | -0.53 | < 0.001 | -0.70 | <0.001 |
| | SF-36 | Other activities (Q5) | 0.52 | < 0.001 | 0.25 | 0.12 |
| | | Accomplished less | 0.54 | < 0.001 | 0.20 | 0.21 |
| | | Less careful | 0.55 | < 0.001 | 0.36 | <0.05 |
| Conflict with friends or family (Q14) | TOP | Overall quality of life | -0.02 | 0.86 | -0.26 | 0.10 |
| Work or other activities (Q15) | SF-36 | Other activities (Q4) | 0.41 | <0.01 | 0.20 | 0.21 |
| | | Accomplished less | 0.24 | 0.06 | 0.09 | 0.59 |
| | | Limited activity | 0.38 | < 0.01 | -0.11 | 0.51 |
| | | Performance | 0.40 | < 0.01 | -0.00 | 0.99 |
| Employment, study, caring (Q16) | TOP | Paid work | 0.56 | < 0.001 | 0.32 | <0.05 |
| | | School | 0.08 | 0.55 | 0.23 | 0.15 |
| Housing (Q17) | TOP | Housing | 0.60 | <0.001 | 0.66 | <0.001 |
| | | Eviction | 0.16 | 0.21 | 0.52 | <0.001 |
| Criminal / illegal activity (Q18) | TOP | Shoplifting | 0.18 | 0.16 | 0.43 | <0.01 |
| | | Drug selling | 0.41 | <0.01 | 0.62 | <0.001 |
| | | Property theft | 0.21 | 0.10 | 0.21 | 0.18 |
| | | Assault | 0.18 | 0.17 | 0.61 | <0.001 |

## Q.12: In the past 4 weeks, how often has your physical health caused problems in your daily life?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

This question is intended to measure a change in the physical health status of the individual. The wording of this question was changed from '*In the past four weeks, how often has your physical health interfered with your day-to-day functioning?*' Recommendations for improving the original ADOM Part B(Te Pou, 2012) were made and identified that the original wording lacked the clarity on whether the question was about general health or

health issues relating to substance misuse. The terminology 'day-to-day' functioning was also considered to be unnecessarily stiff and would be more suitably replaced with more commonly used terminology.

The results in Table 2 indicate a relatively strong association between Q.12 and the comparable measures in both the TOP (Section 4 –D (Physical health)) and SF-36 (Q4). The correlation analysis for the revised wording of this question indicates an overall improvement when compared to the correlation analysis for the original question.

These results indicate that a change from the original question to the revised question shows an improvement.

## Q.13: In the past 4 weeks, how often has your general mental health caused problems with how you go about in your daily life?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

Question 13 is intended to measure a change in the mental and psychological health status of the individual. The wording of this question was changed from '*In the past 4 weeks, how often has your psychological or mental health interfered with your day-to-day functioning?*' Findings from the Te Pou, ADOM Part B recommendations for improvement project (Te Pou, 2012) and discussions from the ADOM Advisory group identified that the original wording lacked the clarity on whether the question was about general mental and/or psychological health issues or relating to substance misuse; was difficult to understand because psychological health could mean different things to different people; was potentially linked with mental illness and stigma; and, considered 'day-to-day' functioning as unnecessarily stiff.

The results from the correlations indicate a relatively strong association between Q.13 and the comparable measure in TOP (Section 4 –A (Psychological health)), however, the association with SF-36 (Q5) is not as strong. This result is expected given that the TOP question (Client's rating of psychological health status - anxiety, depression and problem emotions and feelings) is probably a closer fit to ADOM Q13 than the SF-36 (Q.5).

The improvement in correlation analysis between the TOP and the revised wording of this question observed when compared to the correlation analysis for the original question indicates an improvement in validity.

## Q.14: In the past 4 weeks, how often has your alcohol or drug use led to problems or arguments with friends or family members?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

In question 14, a change in the nature of significant relationships is considered as a parameter consequent of recovery. The revised question follows a small change from the original wording (*In the past 4 weeks, how often has your alcohol or drug use led to conflict with friends or family members?*) and looks to define conflict.

The concurrent validity of ADOM part B, question 14 was compared to the TOP question (Section 4 – G (Overall quality of life)) but not to the SF-36 due to the lack of suitable comparison question on the SF-36. Both the original wording and the revised wording show weak correlation with TOP (Section 4 – G)).

This is possibly because the TOP question is very different from Q14. Overall, the revised wording indicates a modest improvement.

### Q.15: In the past 4 weeks, how often has your alcohol or drug use caused problems with your work or other activities in any of the following: social, recreational, looking after children and other family members, study or other personal activities?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

Question 15 looks at the impact of alcohol and drug use on general day to day activities. The revised question changes '*interfered with*' to '*caused problems with*' (Original question: *How often has your alcohol or drug use interfered with your work or other activities [include social, recreational, parenting / caregiving, study or other personal activities]?*).

Both the original wording and the revised wording of question 15 show weak correlation with SF-36 Q4. This is possibly because SF-36 Q4 is not as comparable as a measure to the ADOM Q15.

However, overall, the revised wording indicates a worsening in association with the SF-36 Q4.

### Q.16: In the past 4 weeks, how often have you done any of the following: paid work, voluntary work, study, looking after children or other caregiving activities?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

Question 16 looks at role functioning, a domain frequently identified by AOD clients as a treatment goal or a reason for seeking treatment. It was also identified by AOD services as an area of importance in measuring treatment outcome (Deering, et. al., 2004). The original question: '*In the past 4 weeks, how often have you engaged in paid employment, voluntary work, study, parenting or other caregiving activities?*' was revised to address the formality of '*engaged in*' and that '*parenting*' did not fit with the theme of the question.

Only TOP and not the SF-36 was considered to have the comparable measures for this question (TOP – Section 4 – B (Paid work) and C (School)). Overall, the revised wording correlated less strongly than the original wording, with the TOP.

## Q.17: In the past 4 weeks, have you had difficulties with housing or finding somewhere stable to live?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

Accommodation stability is the intent of the outcome measured in question 17. The main change from the original question is in addressing the implication carried by the phrase '*how often?*' (Original question: *In the past 4 weeks, how often have you had difficulties with housing or finding somewhere stable to live?*).

When compared to the analysis of the original question with the TOP question (Section 4 – E (Housing) and F (Eviction)), the correlation analysis of the revised question, show an improvement in the strength of association. The SF-36 was not considered to have any comparable measures.

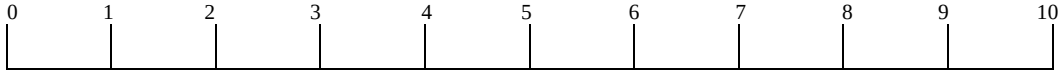
## Q.18: In the past 4 weeks, how often have you been involved in any criminal or illegal activity such as driving a motor vehicle under the influence of alcohol or drugs, assault, shoplifting, or supplying an illicit substance to another person? (Do not include using illegal drugs)

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

Question 18 is intended to provide a marker of criminal involvement across a treatment population, and to demonstrate changes in criminal involvement over time. This question was only minimally changed from the original question (*In the past 4 weeks, apart from using illicit substances, how often have you been involved in any criminal or illegal activity [e.g. driving a motor vehicle under the influence of alcohol or drugs or supplying an illicit substance to another person]?*). The emphasis was on ensuring a distinction between the reason for coming to treatment (i.e. using illegal drugs) and criminal or illegal activity.

Overall, the revised wording indicated an improvement in association with the TOP (Section 3) in all the measures listed. Correlations with 'vehicle theft' and 'fraud' measures listed as part of the TOP (Section 3), were not conducted as no participant provided a positive response to these questions. The SF-36 had no comparative measure to this question.

## Q19. Overall, how close are you to where you want to be in your recovery? Circle the number (10 is the best possible) that best fits where you are now.




Question 19 was added in the Revised ADOM Part B, as the final question summing up progress toward recovery or wellbeing. No measures in the TOP or SF-36 could be compared to this question.

A good number of participants noted the usefulness of this question as a method to track their recovery. Two participants suggested it would be a useful question at the beginning of treatment and then at a further stage in order for them to see their progress.

### Summary of the results from the concurrent validity testing:

Overall the Revised ADOM Part B, showed a better correlation and concurrent validity with the TOP than the SF-36. Most of the revised questions (Q12, Q13, Q14, Q17 & Q18) correlated better with the TOP and SF-36 than the original questions. The revised Q15 and Q16 showed a worse correlation than the original questions.

## Stage 2: Inter-rater reliability

Eight clinicians rated two clinical scenarios with the Revised ADOM Part B. The clinicians participated in this stage of the project simultaneously to control for any bias that can occur through clinicians talking among themselves about the scenarios. The clinicians all had significant experience working in the Alcohol and Drug sector. Two were female and six were males.

Inter-rater reliability, that is, reliability in the way the questions are asked by having the questions asked more than once by the eight different clinicians, was calculated by using the free-marginal kappa. The findings are presented in Table 3. Free-marginal kappa was computed for each question, with 5 categories and 8 raters/clinicians.

**Table 3. Free-marginal Kappa for the Revised ADOM Part B Questions with 5 Categories, 2 Scenarios and 8 Raters**

| Question | Scenarios | Ratings of Clinicians | | | | | | | | Free-marginal kappa |
|---|---|---|---|---|---|---|---|---|---|---|
| | | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | |
| ADOM 12 Physical health | Scenario 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0.999998 |
| | Scenario 2 | 3 | 3 | 3 | 4 | 3 | 2 | 0 | 2 | 0.0624988 |
| ADOM 13 Psychological or mental health | Scenario 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0.330356 |
| | Scenario 2 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 0.687498 |
| ADOM 14 Conflict with friends or family | Scenario 1 | 2 | 3 | 4 | 2 | 4 | 2 | 3 | 2 | 0.107143 |
| | Scenario 2 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 4 | 0.419641 |
| ADOM 15 Work or other activities | Scenario 1 | 4 | 3 | 4 | 4 | 4 | 2 | 4 | 4 | 0.419641 |
| | Scenario 2 | 3 | 3 | 4 | 2 | 2 | 2 | 2 | 4 | 0.107143 |
| ADOM 16 Employment, study, caring | Scenario 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.999998 |
| | Scenario 2 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 0.687498 |
| ADOM 17 Housing | Scenario 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.999998 |
| | Scenario 2 | 0 | 2 | 1 | 1 | 0 | 1 | 4 | 4 | -0.0267863 |
| ADOM 18 Criminal/Illegal activity | Scenario 1 | 2 | 3 | 2 | 0 | 3 | 1 | 0 | 0 | -0.0267863 |
| | Scenario 2 | 3 | 4 | 4 | 2 | 2 | 2 | 3 | 4 | 0.0624988 |
| ADOM 19 Recovery | Scenario 1 | 2 | 0 | 1 | 2 | 1 | 4 | 2 | 1 | 0.0178563 |
| | Scenario 2 | 2 | 0 | 1 | 2 | 2 | 4 | 0 | 2 | 0.0624988 |

### Q.12: In the past 4 weeks, how often has your physical health caused problems in your daily life?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

There is a high level of agreement between clinicians for Q.12 of scenario 1 – with the kappa value being close to 1, indicating perfect agreement. For scenario 2, clinicians show agreement although the level of agreement is low. Overall, Q.12 has positive inter-rater reliability for both scenarios.

### Q.13: In the past 4 weeks, how often has your general mental health caused problems with how you go about in your daily life?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

For Q.13 the free-marginal kappa indicates a low inter-rater reliability for scenario 1 and a modest inter-rater reliability for scenario 2. Overall, Q.13 has positive inter-rater reliability for both scenarios.

### Q.14: In the past 4 weeks, how often has your alcohol or drug use led to problems or arguments with friends or family members?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

As with Q.13, for Q.14 the free-marginal kappa indicates a low inter-rater reliability for scenario 1 and a modest inter-rater reliability for scenario 2. Overall, Q.14 has positive inter-rater reliability for both scenarios.

### Q.15: In the past 4 weeks, how often has your alcohol or drug use caused problems with your work or other activities in any of the following: social, recreational, looking after children and other family members, study or other personal activities?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

For Q.15 the free-marginal kappa indicates a modest inter-rater reliability for scenario 1 and a low inter-rater reliability for scenario 2. Overall, Q.15 has positive inter-rater reliability for both scenarios.

### Q.16: In the past 4 weeks, how often have you done any of the following: paid work, voluntary work, study, looking after children or other caregiving activities?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

There is a high level of agreement between clinicians for Q.16 of scenario 1 – with the kappa value being close to 1, indicating perfect agreement. For scenario 2, clinicians also show a high level of agreement. Overall, Q.16 has positive inter-rater reliability for both scenarios.

### Q.17: In the past 4 weeks, have you had difficulties with housing or finding somewhere stable to live?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

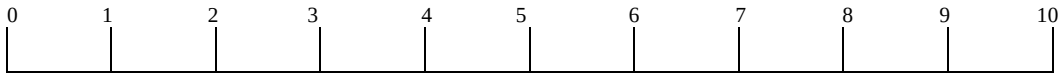
There is a high level of agreement between clinicians for Q.17 of scenario 1 – with the kappa value being close to 1, indicating perfect agreement. For scenario 2, the free-marginal kappa value indicates no agreement between clinicians. In scenario 2, accommodation status is not clear. The scenario indicates that the individual was living with her parents but gave no indication whether this was due to difficulties with housing or whether this was a choice or her actual stable accommodation. No agreement between clinicians was an expected outcome.

### Q.18: In the past 4 weeks, how often have you been involved in any criminal or illegal activity such as driving a motor vehicle under the influence of alcohol or drugs, assault, shoplifting, or supplying an illicit substance to another person? (Do not include using illegal drugs)

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

For Q.18, scenario 1 shows no agreement between clinicians and scenario 2 indicates a low level of agreement. These results could be a reflection of the resistance of clinicians to address criminal activity. This finding was reported in the original ADOM development project (Deering et al, 2004; Deering et al, 2008).

### Q19. Overall, how close are you to where you want to be in your recovery? Circle the number (10 is the best possible) that best fits where you are now.




For Q.19 the free-marginal kappa indicates a low inter-rater reliability for both scenario 1 and scenario 2. Overall, Q.19 has positive inter-rater reliability for both scenarios.

### Summary of the results from the inter-rater reliability:

Overall the Revised ADOM Part B, showed a positive agreement between clinicians for Q.12, Q.13, Q.14, Q.15, Q.16 and Q.19. Although Q.17 indicated no agreement for scenario 2, this is likely to be due to the fact that the accommodation status in scenario 2 was not clear. For Q. 18, there was no agreement for scenario 1 and low agreement for scenario 2, possibly a reflection of the culture within the CADS working environment, where discussions on criminal activity tend to be avoided. For both Q.17 and Q.18, the negative free-marginal kappa value indicated a level of disagreement but not 'perfect disagreement'.

# Discussion and recommendations

The ADOM Part B was revised following a series of discussion groups with clients and clinicians from the AOD sector, and an advisory group of experts in the field. The purpose of the revised version of ADOM Part B is intended to improve the results of the psychometric tests of the Alcohol & Drug Outcome Measure Part B. This project explored whether question revision did improve the psychometric properties of the original questions.

The project objectives included:

- undertaking psychometric testing of the Revised ADOM Part B;
- comparing the results of the revised questions with the original questions of Part B of the ADOM;
- making recommendations to the New Zealand Alcohol and Drug sector on an improved revised version of the ADOM Part B suited for generic use across New Zealand.

The discussion will include an overview of the psychometric properties of the Revised ADOM Part B and how this compares with the psychometric properties of the original version of the ADOM Part B. The discussion is informed by the concurrent validity and inter-rater reliability results of this project and discussion with the advisory group for the Implementation of the ADOM in New Zealand. Limitations of the project will be discussed and recommendations will be made to inform the sector on implementation of the ADOM.

## Psychometric properties of the Revised ADOM Part B

The project identified that the psychometric properties of the Revised ADOM Part B had improved with most of the revised questions, when compared to the psychometric properties of the original ADOM Part B. With most of the revised questions, the results of the concurrent validity testing showed strengthening of the associations and significance tests rejecting the null hypothesis, when compared with the selected existing psychometrically sound instruments, that is, the TOP, Sections 3 and 4, and the SF-36, Questions 4 and 5.

The table below compares the concurrent validity results of the Revised ADOM Part B questions with the results of the original ADOM Part B, highlighting where improvement was achieved and where the concurrent validity was less favourable.

**Table 4. Concurrent Validity of Original ADOM and the Revised ADOM Part B**

| | **Interpretation of results** |
|---|---|
| Q12 | Purpose of the question: Change in physical health<br><br>Relatively strong association between Q.12 and the comparable measures in both the TOP (Section 4 –D (Physical health)) and SF-36 (Q4).<br><br>The correlation with SF-36 Q4(a) indicates worsening of association; however, this part of the question is around amount of time spent on work or other activities (Cut down on the **amount of time** you spent on work or other activities) – overall the questions still strongly correlate.<br><br>Overall improvement when compared to the correlation analysis for the original question.<br><br>**Suggested Outcome: Change to revised question.** |
| Q13 | Purpose of the question: Change in psychological health.<br><br>Improvement in association between Q.13 and the comparable measure in the TOP (Section 4 –A (Psychological health)).<br><br>The association with SF-36 (Q5) is worse.<br><br>The TOP question (Client's rating of psychological health status (anxiety, depression and problem emotions and feelings) is a closer fit to ADOM Q13. The SF-36 Q5 is more around the impact of 'emotional health' and is broken down into 3 answers. Our question does not do this and only gives an overall rating.<br><br>**Suggested Outcome: Change to revised question.** |
| Q14 | Both the original wording and the revised wording show weak correlation with TOP (Section 4 – G (Overall quality of life)). This is possibly because the TOP question is very different from Q14. Overall, the revised wording indicates a modest improvement.<br><br>**Suggested Outcome: Change to revised question.** |
| Q15 | Both the original wording and the revised wording show weak correlation with SF-36 Q4. This is possibly because the question is very different from Q15.<br><br>Although the new wording indicates a worsening in association, the correlation was weak with both the new and the old version. In this case, it is more suitable to change to the new wording and avoid the word 'interfered' which clients report as having a sexual connotation.<br><br>**Suggested Outcome: Change to revised question.** |
| Q16 | Overall, the revised wording indicates a worsening in association with the TOP (Section 4 – B (Paid work) and C (School)).<br><br>**Suggested Outcome: Stick to original wording.** |
| Q17 | Overall, the revised wording indicates an improvement in association with the TOP (Section 4 – E (Housing) and F (Eviction)).<br><br>**Suggested Outcome: Change to revised question.** |
| Q18 | Overall, the revised wording indicates an improvement in association with the TOP (Section 3) in all the measures listed.<br><br>**Suggested Outcome: Change to revised question.** |
| Q19 | No comparative analysis<br><br>We can include this question despite no comparative analysis available. Need to look at this as part of the whole tool. Does the tool hold together as an outcome measure with our population? It fits in.<br><br>**Suggested Outcome: Include this question but undertake further work** |

Psychometric testing highlighted that the Revised as well as the original ADOM Part B are a closer fit to the TOP than to the SF-36. Most of the revised questions (Q12, Q13, Q14, Q17 & Q18) correlated better with the TOP and SF-36 than the original questions. The revised Q15 & Q16 showed a worse correlation than the original questions.

Inter-rater reliability testing for the Revised ADOM Part B overall showed a positive agreement between clinicians for most of the questions (Q.12, Q.13, Q.14, Q.15, Q.16 and Q.19). Although Q.17 indicated no agreement for scenario 2, this is likely to be due to the fact that the accommodation status in scenario 2 was not clear. For Q. 18, there was no agreement for scenario 1 and low agreement for scenario 2, possibly a reflection of the culture within the CADS working environment, where discussions on criminal activity tend to be avoided. For both Q.17 and Q.18, the negative free-marginal kappa value indicated a level of disagreement but not 'perfect disagreement'.

**Table 5. Inter-rater reliability for two clinical scenarios**

| Question | Scenario 1 | Scenario 2 | Interpretation of results |
|---|---|---|---|
| ADOM 12 | 0.999998 | 0.0624988 | Perfect agreement with scenario 1 and agreement with scenario 2<br>**Interpretation: Adequate inter-rater reliability** |
| ADOM 13 | 0.330356 | 0.687498 | Agreement with both scenarios<br>**Interpretation: Adequate inter-rater reliability** |
| ADOM 14 | 0.107143 | 0.419641 | Agreement with both scenarios<br>**Interpretation: Adequate inter-rater reliability** |
| ADOM 15 | 0.419641 | 0.107143 | Agreement with both scenarios<br>**Interpretation: Adequate inter-rater reliability** |
| ADOM 16 | 0.999998 | 0.687498 | Perfect agreement with scenario 1 and scenario 2<br>**Interpretation: Adequate inter-rater reliability** |
| ADOM 17 | 0.999998 | -0.0267863 | Perfect agreement with scenario 1 but no agreement with scenario 2 possibly resulting from the fact that the accommodation status in scenario 2 was not clear.<br>**Interpretation: Adequate inter-rater reliability** |
| ADOM 18 | -0.0267863 | 0.0624988 | No agreement with scenario 1 and low agreement with scenario 2, possibly a reflection of the culture within the CADS working environment, where discussions on criminal activity tend to be avoided.<br>**Interpretation: Inadequate inter-rater reliability.** |
| ADOM 19 | 0.0178563 | 0.0624988 | Agreement with both scenarios<br>**Interpretation: Adequate inter-rater reliability** |

The psychometric properties of the Revised ADOM Part B typically ranged from very good to satisfactory. Analyses of the concurrent validity and inter-rater reliability indicated that for most of the questions the suggested revisions improved the psychometric properties of the ADOM Part B.

## Limitations

The three main limitations were related to the methodology, mainly the sampling procedures. The psychometric testing sample was not obtained by random selection for both the concurrent validity and the inter-rater reliability. There was an overrepresentation of clients with opioid dependence resulting from attendance of opioid dependent clients to their opioid treatment service, on the days of data collection. Not all AOD treatment modalities were represented in the psychometric testing sample (e.g. inpatient detoxification). These limitations were largely the result of budget and time constraints, as well as the trade-offs that frequently occur when conducting research in a clinical environment.

## Recommendations

Based on the psychometric data it is reasonable to conclude that the Revised ADOM Part B has improved the psychometric properties of the original ADOM Part B. The Revised ADOM Part B has appropriate potential as a measure of AOD-related psychosocial issues.

In light of the outcomes of this project, and in light of the project limitations and other considerations discussed, it is the recommendation of the project team that:

- seven of the eight questions of the Revised ADOM Part B (except question 16) should replace the questions of the original ADOM Part B;
- the Revised ADOM Part B has improved psychometric properties and should be seriously considered together with the ADOM Part A, for use as a routine outcome measure across the New Zealand AOD treatment sector;
- the AOD treatment sector is trained to address criminal activities as part of their treatment package;
- the additional question on recovery be included as part of the ADOM and further work be undertaken to test validity.

Since the first recovery question was included in the testing of the revised version of ADOM Part B, another question is being tested by another research group exploring ways of measuring recovery. The question that is being tested is as follows:

> How satisfied are you with your progress towards achieving your recovery goals? Options for response include the following; not at all, slightly, moderately, considerably and extremely.

The ADOM implementation advisory group was consulted on the choice of recovery questions, and both were perceived to be potentially useful. Given that neither question has undergone robust psychometric testing, it is

recommended that both questions are included in the next phase of implementation and testing occur as part of this process.

In summary, the above recommendations are made on the basis of the psychometric properties of the Revised ADOM Part B, and the recognised need and demand in the AOD sector for a standardised and routinely administered measure of AOD use, AOD-related psychosocial issues and recovery. Widespread use of the revised ADOM within the AOD sector would provide valid and reliable outcome data, useful for both clinical decision making and local health service planning or service performance.

Implementation of the revised ADOM in the AOD treatment sector would help ensure a consistency of approach to outcome measurement, and a better quality of treatment, across related treatment pathways. The complexities of AOD service provision (including variable service utilisation as well as client acuity and complexity) and/or of implementing a routine outcome measure in a real world clinical setting may undermine the reliability of aggregated data. Accordingly, ADOM-derived aggregate data should always be interpreted with a degree of caution.

# Appendices

## Appendix 1. Ethics Letter of Approval

Health and Disability Ethics Committees

**Upper South A Regional Ethics Committee**
c/- Ministry of Health
Montgomery Watson Building
6 Hazeldean Road
Christchurch
Phone: (03) 974 2304
Email: uppersoutha_ethicscommittee@moh.govt.nz

8 May 2012

Dr Susana Galea
Pitman House
50 Carrington Rd
Pt Chevalier
Auckland

Dear Dr Galea

**Ethics ref:** **URA/12/EXP/028 (please quote in all correspondence)**
**Study title:** **Validity and reliability study of the Alcohol and Drug Outcome Measure**

The above study has been given ethical approval by the Chairperson and Deputy Chairperson of the Upper South A Regional Ethics Committee.

**Approved Documents**
Study proposal
Treatment Outcomes Profile
Alcohol and Drug Outcome Measure
SF-36 Health Survey
Information sheet and consent form dated April 2012

**Final Report**
The study is approved until **31 August 2012**. A final report is required at the end of the study and a report form to assist with this is available at http://www.ethics.health.govt.nz . If the study will not be completed as advised, please forward a report form and an application for extension of ethical approval one month before the above date.

**Amendments**
It is also a condition of approval that the Committee is advised if the study does not commence, or is altered in any way, including all documentation eg advertisements, letters to prospective participants.

Please quote the above ethics committee reference number in all correspondence.

It should be noted that Ethics Committee approval does not imply any resource commitment or administrative facilitation by any healthcare provider within whose facility the research is to be carried out. The organisation may specify their own processes regarding notification or approval.

We wish you all the best with your study.

Yours sincerely

**Alieke Dierckx**
Administrator
Upper South A Regional Ethics Committee
Uppersoutha_ethicscommittee@moh.govt.nz

# Appendix 2. Participant Information Sheet

## Alcohol and Drug Outcome Measure – Part B testing and validation
## Participant information sheet

*HELLO, KIA ORA, TALOFA LAVA, FAKALOFA LAHI ATU, NI SA BULA VINAKA, MALO E LELEI, TALOHA NI, KIA ORANA, NAMASTE, ANNONG HASEYO, NI HAO, KONNICHIWA*

**Can you help?:** Our team are testing a set of questions that measure outcomes for people that use alcohol and other drugs. The Alcohol and Drug Outcome Measure has had some changes made to some of the questions and this study involves testing the new questions. You are invited to take part in the study to test the tool.

**What is this study about?** The purpose of this study is to see whether the changed questions of the Alcohol & Drug outcome measure still measure what they set out to measure.

**What would I need to do?** Taking part will take about 15-30 minutes of your time. A researcher will meet with you and ask you the questions from the ADOM tool, along with questions from two alternative tools. When we have enough participants, we will compare the results from the three tools to see whether the new questions of the ADOM are useful for measuring change and progress.

**Do you have to take part?** It is your choice whether to take part or not. This means that **you do not have to take part** if you don't want to. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason and without detriment to yourself and there will be no adverse impact on any current or future service that you receive from CADS.

**Will anyone know you are involved?** Any information that you share will be recorded in paper form and stored in a locked filing cabinet at CADS West in Henderson.
All information which is collected about you during the course of the research will remain strictly confidential in the same way that your health record is confidential.
However, information that identifies you will be removed will not be presented in the research results.

**What are the benefits?** If you choose to take part, the information you give us will help us to know whether the tool that we are developing is useful to people that use alcohol and other drugs.
Some people find that completing these tools help them to see where they are in terms of the goals for their own use.

**Are there any risks?** We believe it is not risky to take part however there is a risk talking about these areas of your life may make lead to strong feelings. If this is the case, the researcher will check whether you need to contact someone for support.

You can also contact your usual CADS clinician and there are some support numbers listed below.

**What will happen to the results of the research project?** The results will be compiled into a report that will be completed by the end of July 2012. Your information that is included in this report will not identify you in any way.
The results of this research may be used in additional or subsequent studies.
If you would like to know the results of this project then you can contact us (address below) and we will send you a **summary of the findings**

**Who is organising and funding the research?** The research is being conducted by Community Alcohol and Drug Service (CADS) – part of Waitemata District Health Board (Waitemata DHB) with assistance from Te Pou – , National Centre of Mental Health Research, Information and Workforce Development.

**Compensation**
In the unlikely event of a physical injury as a result of your participation in this study, you may be covered by ACC under the Injury Prevention, Rehabilitation and Compensation Act. ACC cover is not automatic and your case will need to be assessed by ACC according to the provisions of the 2002 Injury Prevention Rehabilitation and Compensation Act. If your claim is accepted by ACC, you still might not get any compensation. This depends on a number of factors such as whether you are an earner or non-earner. ACC usually provides only partial reimbursement of costs and expenses and there may be no lump sum compensation payable. There is no cover for mental injury unless it is a result of physical injury. If you have ACC cover, generally this will affect your right to sue the investigators. If you have any questions about ACC, contact your nearest ACC office or the investigator.

**Other information**
If you have any queries or concerns regarding your rights as a participant in this study you may wish to contact a Health and Disability Advocate:

- North Island - Auckland and North: 0800 555 050
- Free Fax (NZ wide): 0800 2787 7678 (0800 2 SUPPORT)
- Email (NZ wide): advocacy@hdc.org.nz

To ensure ongoing cultural safety Nga Kai Tataki - Maori Research Review Committee Waitemata DHB encourage those who identify themselves as Maori and who are participating in health research or clinical trials to seek cultural support and advice from either Mo Wai Te Ora – Maori Health Services or their own Kaumatua or Whaea.

For assistance please contact the Services Clinical Leader for Mo Wai Te Ora – Maori Health on 09 486 1491 ext: 2324 or the Maori Research Advisor on 09 486 1491 ext: 2553

**This study has been submitted for ethical approval from the Upper South A Regional Ethics Committee.**

**Contact for further information:**


| | | |
|---|---|---|
| Principal Investigator: | **Dr Susanna Galea**. | Ph: (09) 8155830<br>Email: susanna.galea@waitematadhb.govt.nz |
| AOD Clinician: | Polly Websdell | Ph: (09) 8155 857.<br>Email: polly.websdell@waitematadhb.govt.nz |
| Address: | Community Alcohol and Drug Services, Pitman House, 50 Carrington Rd, Pt Chevalier, Auckland 1025 | |


***Thank you very much for your help.***

# Appendix 3. Consent Form

## Alcohol and Drug Outcome Measure – Part B testing

**Principle Investigator:** Susanna Galea

# ~CONSENT FORM~

**Please tick the relevant boxes** ✓

| | | | |
|---|---|---|---|
| English | I wish to have an interpreter | Yes | No |
| Māori | E hiahia ana ahau ki tetahi kaiwhaka Māori/kaiwhaka pakeha korero | Ae | Kao |
| Cook Island Māori | Ka inangaro au i tetai tangata uri reo | Ae | Kare |
| Fijian | Au gadreva me dua e vakadewa vosa vei au | Io | Sega |
| Niuean | Fia manako au ke fakaaoga e taha tagata fakahokohoko kupu | E | Nakai |
| Sāmoan | Ou te mana'o ia i ai se fa'amatala upu | Ioe | Leai |
| Tokelaun | Ko au e fofou ki he tino ke fakaliliu te gagana Peletania ki na gagana o na motu o te Pahefika | Ioe | Leai |
| Tongan | Oku ou fiema'u ha fakatonulea | Io | Ikai |

- I have read the Information Sheet for this study and have had details of the study explained to me Yes ☐ No ☐
- My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time. Yes ☐ No ☐
- I also understand that I am free to withdraw from the study at any time. Yes ☐ No ☐
- I agree to provide information to the researchers under the conditions of confidentiality set out on the information sheet. Yes ☐ No ☐
- I wish to participate in this study under the conditions set out in the Information Sheet. Yes ☐No ☐
- I have been offered a copy of this form Yes ☐No ☐

---

**Name of participant**

……

**Signature**

……

**Date**

**Name of researcher**

……

**Signature**

……

**Date**

***If you would like a written summary of the results of the study sent to you, please supply your address below***

# Appendix 4. ADOM Questionnaires

## ADOM Validation

### Comparative Measures
### TREATMENT OUTCOMES PROFILE



Date……

## Section 3. Crime

**Record days of shoplifting, drug selling and other categories committed in the past four weeks**

| | Week 4 | Week 3 | Week 2 | Week 1 | Total |
|---|---|---|---|---|---|
| A. Shoplifting | 0-7 | 0-7 | 0-7 | 0-7 | 0-28 |
| B. Drug Selling | 0-7 | 0-7 | 0-7 | 0-7 | 0-28 |

C. Theft from or of a vehicle — **Yes** ☐ **No** ☐

D. Other property theft or burglary — **Yes** ☐ **No** ☐

E. Fraud, forgery and handling stolen goods — **Yes** ☐ **No** ☐

Enter **Y** if any yes, otherwise **N** ☐

F. Commiting assault or violence — **Yes** ☐ **No** ☐ Enter **Y** or **N** ☐

## Section 4: Health and Social Functioning

A. Client's rating of psychological health status ( anxiety, depression and problem emotions and feelings)

Poor 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 Good — 0-20 ☐

**Record days worked and at school or tertiary education for the past four weeks**

| | Week 4 | Week 3 | Week 2 | Week 1 | Total |
|---|---|---|---|---|---|
| B. Days paid work | 0-7 | 0-7 | 0-7 | 0-7 | 0-28 |
| C. Days attended school or tertiary education | 0-7 | 0-7 | 0-7 | 0-7 | 0-28 |

D Client's rating of physical health status (extent of physical illness and bothered by symptoms)

Poor 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 Good — 0-20 ☐

**Record accommodation items for the past four weeks**

E. Acute Housing Problem — **Yes** ☐ **No** ☐ Enter **Y** or **N** ☐

F. At risk of eviction — **Yes** ☐ **No** ☐ Enter **Y** or **N** ☐

G. Client's rating of overall quality life, (e.g. able to enjoy life, gets on well with family and partner)

Poor 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 Good — 0-20 ☐

# ADOM Validation
# Comparative Measures
## SF-36


(IQOLA SF-36 Standard New Zealand Version 1.0 - 7/94)

Date…….

**INSTRUCTIONS:** This questionnaire asks for your views about your health, how you feel and how well you are able to do your usual activities.

Answer every question by marking the answer as indicated. If you are unsure about how to answer a question, please give the best answer you can.

1. In general, would you say your health is? (circle one**)**

| Excellent | Very good | Good | Fair | Poor |
|---|---|---|---|---|
| 5 | 4 | 3 | 2 | 1 |

2. **Compared to one year ago**, how would you rate your health in general **now**? (circle one**)**

| Much better now than one year ago | Somewhat better now than one year ago | About the same as one year ago | Somewhat worse now than one year ago | Much worse now than one year ago |
|---|---|---|---|---|
| 5 | 4 | 3 | 2 | 1 |

**3**. The following questions are about activities you might do during a typical day. **Does your health now limit you** in these activities? If so, how much? (circle one**)**

| **ACTIVITIES** | **Yes, Limited A Lot** | **Yes, Limited A Little** | **No, Not Limited At All** |
|---|---|---|---|
| a. **Vigorous activities**, such as running, lifting heavy objects, participating in strenuous sports | 1 | 2 | 3 |
| b. **Moderate activities**, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf | 1 | 2 | 3 |
| c. Lifting or carrying groceries | 1 | 2 | 3 |
| d. Climbing **several** flights of stairs | 1 | 2 | 3 |
| e. Climbing **one** flight of stairs | 1 | 2 | 3 |
| f. Bending, kneeling or stooping | 1 | 2 | 3 |
| g. Walking **more than one kilometre** | 1 | 2 | 3 |
| h. Walking **half a kilometre** | 1 | 2 | 3 |
| i. Walking **100 metres** | 1 | 2 | 3 |
| j. Bathing or dressing yourself | 1 | 2 | 3 |

**4**. During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities as a **result of your physical health**? (Circle one number on each line**)**

| | YES | NO |
|---|---|---|
| a. Cut down on the **amount of time** you spent on work or other activities | 1 | 2 |
| b. **Accomplished less** than you would like | 1 | 2 |
| c. Were limited in the **kind** of work or other activities | 1 | 2 |
| d. Had **difficulty** performing the work or other activities (for example, it took extra effort) | 1 | 2 |

5. During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious) ? (Circle one number on each line**)**

| | YES | NO |
|---|---|---|
| a. Cut down on the **amount of time** you spent on work or other activities | 1 | 2 |
| b. **Accomplished less** than you would like | 1 | 2 |
| c. Didn't do work or other activities as **carefully** as usual | 1 | 2 |

6. During the **past 4 weeks**, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbours, or groups? circle one

| Extremely | Very good | Moderately. | Slightly | Not at all. |
|---|---|---|---|---|
| 5 | 4 | 3 | 2 | 1 |

7. How much **bodily pain** have you had during the **past 4 weeks**?

| Very severe | Severe | Moderate. | Mild | Very mild. | No bodily pain |
|---|---|---|---|---|---|
| 6 | 5 | 4 | 3 | 2 | 1 |

8. During the past **4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)? (Circle one)

| Extremely. | Quite a bit | Moderately. | A little bit | Not at all |
|---|---|---|---|---|
| 5 | 4 | 3 | 2 | 1 |

9. These questions are about how you feel and how things have been with you **during the past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling.
How much of the time during **the past 4 weeks** -

| **ACTIVITIES** | **All of the Time** | **Most of the Time** | **A Good Bit of the Time** | **Some of the Time** | **A Little of the Time** | **None of the Time** |
|---|---|---|---|---|---|---|
| a. Did you feel full of life? | 1 | 2 | 3 | 4 | 5 | 6 |
| b. Have you been a very nervous person? | 1 | 2 | 3 | 4 | 5 | 6 |
| c. Have you felt so down in the dumps that nothing could cheer you up? | 1 | 2 | 3 | 4 | 5 | 6 |
| d. Have you felt calm and peaceful? | 1 | 2 | 3 | 4 | 5 | 6 |
| e. Did you have a lot of energy? | 1 | 2 | 3 | 4 | 5 | 6 |
| f. Have you felt down? | 1 | 2 | 3 | 4 | 5 | 6 |
| g. Did you feel worn out? | 1 | 2 | 3 | 4 | 5 | 6 |
| h. Have you been a happy person | 1 | 2 | 3 | 4 | 5 | 6 |
| i. Did you feel tired? | 1 | 2 | 3 | 4 | 5 | 6 |

10. During the **past 4 weeks**, how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting with friends, relatives, etc.)?,,,,,(circle one)

| None of the time | A little of the time | Some of the time | Most of the time | All of the time |
|---|---|---|---|---|
| 5 | 4 | 3 | 2 | 1 |

11. How TRUE or FALSE is each of the following statements for you?..... (circle one number on each line)

| | **Definitely True** | **Mostly True** | **Don't Know** | **Mostly False** | **Definitely False** |
|---|---|---|---|---|---|
| a. I seem to get sick a little easier than other people | 1 | 2 | 3 | 4 | 5 |
| b. I am as healthy as anybody I know | 1 | 2 | 3 | 4 | 5 |
| c. I expect my health to get worse | 1 | 2 | 3 | 4 | 5 |
| d. My health is excellent | 1 | 2 | 3 | 4 | 5 |

# ADOM Validation
# Comparative Measures

## Alcohol and Drug Outcome Measure
## Revised ADOM – Part B

Date……

12. In the past 4 weeks, how often has your general physical health caused problems in your daily life?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

13. In the past 4 weeks, how often has your general mental health caused problems with how you go about your daily life?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

*14.* In the past 4 weeks, how often has your alcohol or drug use led to problems or arguments with friends or family members?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

*15.* In the past 4 weeks, how often has your alcohol or drug use caused problems with your work or other activities in any of the following: social, recreational, looking after children and other family members, study or other personal activities?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

16. In the past 4 weeks, how often have you done any of the following: paid work, voluntary work, study, looking after children or other caregiving activities?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

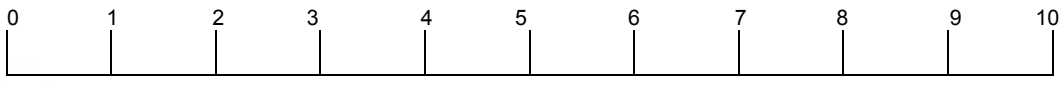
17. In the past 4 weeks, have you had difficulties with housing or finding somewhere stable to live?

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

*18.* In the past 4 weeks, how often have you been involved in any criminal or illegal activity such as driving a motor vehicle under the influence of alcohol or drugs, assault, shoplifting, or supplying an illicit substance to another person? ***(Do not include using illegal drugs)***

☐ Never ☐ Less than weekly ☐ Once or twice a week ☐ Three or four times a week ☐ Daily or almost daily

19. Overall, how close are you to where you want to be in your recovery?
Circle the number (10 is the best possible) that best fits where you are now.



# Appendix 5. ADOM Part B Scenarios

## ADOM Part B Validation: Scenario 1

### *ANDREW*

**Alcohol and other drug use**
Reports drinking 35 Standard Drinks (SDs) per day. 24 as scrumpy cider (3x 1.5 litre bottles) plus hip flask (375ml) Vodka (11 SDs)
Cost approx $200 per week
First drink - usually at 10am after going to the Gym
On Fridays starts at 6 am on waking
Drinks steadily through out day
Last alcohol free day was while in-patient for his last medical detox
Does not wake up at night to drink but can experience sweats/ shakes. Reports drinking this way for 10years and cannot remember any days without alcohol.
Nil other drugs or gambling issues and stopped tobacco use 6 months ago

**Withdrawals**
Shakes, sweats, dry retching, diarrhoea and vomiting
Experiences withdrawals on waking

**Consequences**
Financial costs and impacts on ability to pay mortgage
Previous partner left due to his drinking
Impact on family
Unable to work
Health Impacts
Drinking and driving

**Mental health**
Reports he does not like people and lives by himself
Appears guarded – some difficulty staying focused during interview.
Thought form and content appropriate
Reports no history of depression, anxiety or other mental health concerns

**Physical Health**
Oesaphageal varices – recently banded due to a bleed that required hospitalisation
Hepatitis (non viral)
Hiatus hernia
Peripheral neuritis

**Social situation**
Lives with partner and her two teenagers in mortgaged house. He has lived in the same house for the last 10 years

Partner's children and he do not get along. They are dismissive of him and verbally abusive at times.
Partner has not had a drink for three years.
Experiencing difficulties in the relationship -ambivalent about whether to stay.
Some arguments about the impact of drinking on the relationship and Andrew's inability to find work due to his health problems and his drinking. Arguments tend to occur during the day at the weekends when they are both home.

Andrew tries to go to the gym for a swim and spa, most days. He is unable to achieve at the gym, what he used to achieve two years ago. Apart from the gym, his only other activities are to go to the liquor store or to the supermarket. He does not catch up with friends regularly or involve himself in leisure activities. He used to work in hospitality and misses working and being sociable.
He is unable to work due to his health.
He has never had a criminal conviction and is not involved in any illegal activity.

## ADOM Part B Validation: Scenario 2

### *Ashley is a 22yr old.*

**Current alcohol and other drug use**:
Using alcohol 1-2 times per week;
Amount: bourbon pre-mix 8% up to 12 per occasion;
Cannabis use daily – 2 joints every evening with friends;
Nicotine dependent – smoking 20 ciggies daily.

**History of alcohol and other drug use**:
Began alcohol use at 15yrs of age;
occasional periods of abstinence;
no previous Detox admissions;
no withdrawal history.
Started using cannabis at 20 years of age – initially in weekends, then daily.

**Mental health;**
Feels depressed on most days;
Characterised by apathy, low motivation, inability to enjoy life, tearfulness, poor sleep, low self-esteem.
Mood 6/10
No previous contact with CMHS;
Not on antidepressant medication
Reports occasional visual hallucinations following drinking episodes

**Physical health:**
Blackouts – following every drink episode;
loss of appetite
Attended emergency dept. 3 times in the past 2 weeks following head injury after falling
Frequent asthma attacks

**Social Situation:**
Lives with her parents; Frequent family arguments around drinking; Have been given 2 weeks to pack her stuff and leave.
"friends all drink because there is nothing else to do";
works full time – frequent sick days
due in Court in a few weeks – charged with driving under the influence of alcohol. Reports still drinks and drives because transport is not easy
Not involved in any other criminal activity

# Appendix 6. Correlations (Spearman's r) between comparable parts of ADOM Part B, the TOP and SF-36

| ADOM Measure | Comparable Measure | | Original ADOM Part B | | Revised ADOM Part B | |
|---|---|---|---|---|---|---|
| | | | *r* | *p* | *r* | *p* |
| **Physical Health (Q12)** | | | In the past four weeks, how often has your physical health interfered with your day-to-day functioning? | | In the past 4 weeks, how often has your physical health caused problems in your daily life? | |
| | TOP | Physical health | -0.36 | <0.01 | -0.61 | <0.001 |
| | SF-36 | Other activities (Q4) | 0.53 | < 0.001 | 0.41 | <0.01 |
| | | Accomplished less | 0.38 | < 0.01 | 0.52 | <0.001 |
| | | Limited activity | 0.56 | < 0.001 | 0.65 | <0.001 |
| | | Performance | 0.53 | < 0.001 | 0.75 | <0.001 |
| **Psychological or mental health (Q13)** | | | In the past four weeks, how often has your psychological or mental health interfered with your day-to-day functioning? | | In the past 4 weeks, how often has your general health caused problems with how you go about your daily life? | |
| | TOP | Psychological status | -0.53 | < 0.001 | -0.70 | <0.001 |
| | SF-36 | Other activities (Q5) | 0.52 | < 0.001 | 0.25 | 0.12 |
| | | Accomplished less | 0.54 | < 0.001 | 0.20 | 0.21 |
| | | Less careful | 0.55 | < 0.001 | 0.36 | <0.05 |
| **Conflict with friends or family (Q14)** | | | In the past four weeks, how often has your alcohol or drug led to conflict with friends or family members? | | In the past 4 weeks, how often has your alcohol or drug use led to problems or arguments with friends or family members? | |
| | TOP | Overall quality of life | -0.02 | 0.86 | -0.26 | 0.10 |
| **Work or other activities (Q15)** | | | In the past four weeks, how often has your alcohol or drug use interfered with your work or other activities (include social, recreational, parenting/caregiving, study or other personal activities)? | | In the past 4 weeks, how often has your alcohol or drug use caused problems with your work or other activities in any of the following: social, recreational, looking after children and other family members, study or other personal activities? | |
| | SF-36 | Other activities (Q4) | 0.41 | <0.01 | 0.20 | 0.21 |
| | | Accomplished less | 0.24 | 0.06 | 0.09 | 0.59 |
| | | Limited activity | 0.38 | < 0.01 | -0.11 | 0.51 |
| | | Performance | 0.40 | < 0.01 | -0.00 | 0.99 |
| **Employment, study, caring (Q16)** | | | In the past four weeks, how often have you engaged in paid employment, voluntary work, study, parenting or other care giving activities? | | In the past 4 weeks, how often have you done any of the following: paid work, voluntary work, study, looking after children or other caregiving activities? | |
| | TOP | Paid work | 0.56 | < 0.001 | 0.32 | <0.05 |
| | | School | 0.08 | 0.55 | 0.23 | 0.15 |

| ADOM Measure | Comparable Measure | | Original ADOM Part B | | Revised ADOM Part B | |
|---|---|---|---|---|---|---|
| | | | *r* | *p* | *r* | *p* |
| **Housing (Q17)** | | | In the past 4 weeks, how often have you had difficulties with housing or finding somewhere stable to live? | | In the past 4 weeks, have you had difficulties with housing or finding somewhere stable to live? | |
| | TOP | Housing | 0.60 | <0.001 | 0.66 | <0.001 |
| | | Eviction | 0.16 | 0.21 | 0.52 | <0.001 |
| **Criminal / illegal activity (Q18)** | | | In the past 4 weeks how often have you been involved in any criminal or illegal activity? | | In the past 4 weeks, how often have you been involved in any criminal or illegal activity such as driving a motor vehicle under the influence of alcohol or drugs, assault, shoplifting, or supplying an illicit substance to another person? (Do not include using illegal drugs) | |
| | TOP | Shoplifting | 0.18 | 0.16 | 0.43 | <0.01 |
| | | Drug selling | 0.41 | <0.01 | 0.62 | <0.001 |
| | | Property theft | 0.21 | 0.10 | 0.21 | 0.18 |
| | | Assault | 0.18 | 0.17 | 0.61 | <0.001 |

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