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# PRELIMINARY WORK TOWARDS VALIDATING A DRAFT OUTCOME MEASURE FOR USE IN THE ALCOHOL AND DRUG SECTOR

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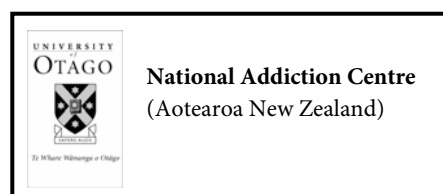
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# EXECUTIVE SUMMARY

This report presents findings of a research project - ADOPT Part II - tasked with developing an outcome measurement tool potentially suited for routine use with clients in the New Zealand alcohol and other drug (AOD) treatment sector.

Specific objectives of the ADOPT Part II project included: to design or refine a questionnaire that assesses substance misuse, and measures change, in substance use behaviour in people with AOD problems; to undertake psychometric testing of the newly designed or refined questionnaire in a range of AOD clinical populations; and to make recommendations on the information system requirements to assist with the final instrument being incorporated into the MH-SMART (Mental Health – Standard Measures of Assessment and Recovery) outcomes measure suite.

The study methodology comprised two stages. Stage one focused on the refining of a possible AOD-specific outcome measure, including the design, outcome domains and response format. The second stage examined the psychometric properties of the proposed measure, including its test-retest reliability, concurrent validity and sensitivity to change. Design parameters and domain areas for the proposed outcome measure had been previously identified in Part I of the ADOPT study (Deering et al., 2004), where a prototype instrument was presented. This prototypical measure consisted of two sections: Section A covering type and frequency of substance use and Section B covering associated psychosocial issues. The design methodology for the current study was based on refining this prototype via a series of consultation and review processes.

Feedback from an expert panel of six senior AOD clinicians was incorporated into the original prototype instrument and presented in ADOPT Part I. This amended prototype was then reviewed by 14 AOD treatment stakeholders acting as key informants. Further amendments were made based on this feedback and the resulting draft instrument was piloted with 22 AOD clients and their clinicians. Feedback from both clients and clinicians once again informed further refinements made to the draft instrument. This version, henceforth named the Alcohol and Drug Outcome Measure (ADOM), was then subjected to psychometric testing.

The aims of the psychometric testing stage were to assess the test-retest reliability, concurrent validity, and sensitivity to change of the ADOM. To ensure adequate statistical power for the respective analyses, 50 new admissions to participating AOD community treatment services in Auckland and Christchurch were required to

complete the ADOM at three distinct time points over a period of four to six weeks, along with a complete suite of comparison measures at the first and third time points.

Test-retest reliability was assessed using Cohen's Kappa ( $k$ ) for categorical and ordinal data and intraclass correlation coefficients (ICC) for continuous data. Concurrent validity was assessed using Cohen's Kappa for categorical data and Spearman's rank correlation coefficient ( $r$ ) for continuous data. Sensitivity to change was assessed using paired sample t-tests and the Reliable Change Index (RCI) for continuous data, the McNemar test for categorical data and the Wilcoxin Signed Ranks test for ordinal data.

A total of 56 clients successfully completed the ADOM at all three interview points, plus the comparative measures at interviews one and three.

Test-retest results for Part A of the ADOM were consistently good. Intraclass correlation coefficients (ICC) on the continuous measures were above 0.75 in every case, indicating excellent test-retest reliability. Cohen's Kappa indicated the categorical measures on Part A also exceeded the minimum acceptable value (0.40), as did all the measures on Part B of ADOM. However, none of the measures included on Part B scored above 0.60, a level indicative of good test-retest reliability.

Concurrent validity results for Part A of the ADOM were also consistently good. Spearman's rank correlation coefficients between ADOM Part A and the comparison measures all achieved an  $r$  of 0.77 or higher and were all statistically significant, indicating strong inter-measure correlation. Correlations between ADOM Part B and comparison measures varied between the strong (0.50-1.0) and weak (0.10-0.29) range.

For both Parts A and B of the ADOM, many variables to test sensitivity showed little change. Not all measures indicated statistically significant change between baseline and follow-up. However, greater change was evident on the ADOM Part A measures as compared to the Part B measures and the level of change identified by both Parts A and B were respectively highly and reasonably consistent with that recorded by comparative measures. Thus, both parts of the ADOM were seemingly sensitive to change that did occur in their respective areas of measurement.

Based on the outcomes of the statistical analysis and the complexities of outcome monitoring in a real world clinical setting, the project team recommend that:

1. ADOM Part A should be seriously considered for use as a routine outcome measure across the New Zealand AOD treatment sector
2. ADOM Part A should be considered for use as a routine outcome measure across the New Zealand mental health sector
3. ADOM Part B should be made available to New Zealand AOD treatment services for use at their discretion.

A range of recommendations were also provided to assist in the implementation of ADOM Part A, Part B or both Parts A and B if this decision were to be made. These recommendations covered which services the ADOM should be employed in, method and timing of administration, scoring protocols, functionality, information system requirements and a range of 'other' considerations.

# ACKNOWLEDGEMENTS

This study was made possible by the generous support of Te Pou, the National Centre of Mental Health Research, Information and Workforce Development. The authors acknowledge the members of the project advisory board and the support of the Waitemata District Health Board Community Alcohol and Drug Service and the Canterbury District Health Board Community Alcohol and Drug Service and Methadone Treatment Programme and the staff and clients of these services who participated in the trials as well as all other participants involved in this study.



# ABBREVIATIONS

ADOM	Alcohol and Drug Outcome Measure
AOD	Alcohol and other Drug
ATOM	Alcohol Treatment Outcome Measure
BTOM	Brief Treatment Outcome
CADS	Community Alcohol and Drug Service
CRRC	Clinical Research & Resource Centre
DDI	Degree of Drug use Index
ICC	Intraclass Correlation Coefficients
MH - SMART	Mental Health – Standard Measures of Assessment and Recovery
MHRDS	Mental Health Research and Development Strategy
MMT	Specialist Methadone Maintenance Treatment
MTP	Methadone Treatment Programme
NAC	National Addiction Centre
RCI	Reliable Drug Index
TLFB	Timeline Follow Back
TOP	Treatment Outcome Profile
WDHB	Waitemata District Health Board

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# 1. INTRODUCTION

This report presents findings from a research project - ADOPT Part II - tasked with developing an outcome measurement tool potentially suited for routine use with adult clients in the New Zealand alcohol and other drug (AOD) treatment sector. The project was informed by an earlier study which, based on a review of the literature and extensive sector consultation, determined that currently available outcome measures were not suited for generic use across the New Zealand AOD treatment sector (Deering et al., 2004). This recommendation was made on the basis that existing measures were variously: too lengthy, specific to one type of substance or treatment modality, untested with Māori or Pacific peoples, items were not specific/relevant to the New Zealand setting, or required minimal consumer participation in the assessment process.

Both parts of the project were funded through the New Zealand Mental Health Research and Development Strategy (MHRDS), as part of the MH-SMART (Mental Health – Standard Measures of Assessment and Recovery) initiative. The aim of the MH-SMART initiative is to support recovery through promoting and facilitating an outcomes focused culture in the mental health and addictions sector. A suite of outcome measures collectively suited to a wide range of mental health and AOD treatment contexts are currently being developed and implemented in order to achieve this aim. It is anticipated that the outcome measure presented in this report will form part of this suite where, in addition to meeting the needs of specialist AOD treatment services, it may also be used by mental health services with co-morbid client populations.

Specific objectives of the ADOPT Part II project included:

- to design or refine a questionnaire that assesses substance misuse, and measures change, in substance use behaviour in people with AOD problems
- to undertake psychometric testing of the newly designed or refined questionnaire in a range of AOD clinical populations
- to make recommendations on the information system requirements to assist with the final instrument being incorporated into the MH-SMART outcomes measure suite.

The project was conducted by the Clinical Research & Resource Centre (CRRC), Waitemata District Health Board (WDHB) in collaboration with the National Addiction Centre (NAC), University of Otago, and was supported by an expert advisory board. The advisory board comprised Maori, Pacific, consumer, AOD sector, and Ministry of Health representatives as well as an independent contractor experienced in outcome measurement and health sector information technology systems. Approval for the study was granted by New Zealand's Health and Disability Multi-Region Ethics Committee (ref: MEC/06/02/015).

## 2. METHOD

The study methodology comprised two stages. The first stage focused on the development of a possible AOD-specific outcome measure, including the design, outcome domains and response format. The second stage then sought to examine the psychometric properties of the proposed measure, including its test-retest reliability, concurrent validity and sensitivity to change. Each stage is described in detail below.

### 2.1. STAGE ONE: DEVELOPMENT

#### 2.1.1. DESIGN PARAMETERS

Design parameters for the proposed outcome measure had been previously identified in Part I of the ADOPT study (Deering et al., 2004). The measure was required to be brief (5-10 minutes), multi-dimensional, completed in direct consultation with the client, require minimal staff training, and be perceived to have immediate clinical utility (i.e. inform point-in-time clinical decision making). Domain areas identified during the ADOPT I consultation process as being of most importance to measure included: AOD use; physical, mental, emotional wellbeing; quality of life; feeling happy; stability; education; employment; activity; finances; family and whanau relationships; and criminal activity. In addition, a reference period of approximately four weeks had been recommended for the measure (i.e. AOD use and associated issues over the last four weeks) given the intention to employ it multiple times over the course of a treatment episode.

#### 2.1.2. DESIGN METHODOLOGY

A prototype measure, incorporating the design parameters identified above, was presented in the ADOPT Part I project report. This prototypical measure consisted of two sections: Section A covering type and frequency of substance use and Section B covering associated psychosocial issues (see Appendix 1). The proposed prototype, however, had not been subjected to critical review or presented for stakeholder feedback. Accordingly, the design methodology was based on refining the original prototype via a series of consultation and review processes.

In the first instance an expert panel consisting of six senior AOD clinicians were invited to write or recommend questions it would consider important to include in a brief AOD treatment outcome measure that conformed to the design parameters outlined above. The six clinicians on the panel were selected on the basis that they were recognised clinical leaders in the AOD treatment sector, were employed in positions representative of their leadership status and had an understanding of outcome measurement issues. To assist their efforts, they were provided the original prototype along with a small number of example questions drawn from existing outcome measurement, screening or assessment tools. Additionally, the expert panel was invited to draw on examples from instruments they were already aware of. Clinicians on the expert panel were instructed to use these examples to assist their decision making process through choosing to recommend use of the existing questions, reconstruct or disregard them. The expert panel was asked to write and/or recommend as many questions as considered appropriate for inclusion. These questions could be broad or specific in their focus. The expert panel were also asked to indicate preferred response methods for the various questions they provided, for example a rating method (e.g. 5 point response scale), a multi-choice method, an open-ended method, or a combination of response methods.

Based on the response of the expert panel, amendments were made to Part A of the original prototype and additional questions were included in Part B (see Appendix 2). All amendments and additions were determined following a discussion amongst project team members and consultation with the project advisory board. Fourteen AOD treatment stakeholders representing AOD service managers, clinicians and clients, including Maori and Pacific Island representatives, from a range of different services across New Zealand were then invited to provide

feedback on the revised prototype. These key informants were asked to consider the content, design and composition of the revised prototype. Key informants were reminded that, when finalised, the tool would probably only have 10 to 15 of the suggested 26 questions and were invited to provide input that would influence which questions would be retained and which omitted. Key informants were asked to review the revised prototype and provide feedback about its strengths and weaknesses, and any omissions or important issues that might have been overlooked. Their subsequent feedback was recorded, tabulated (see Appendix 3) and then discussed amongst project team members and the project advisory board. The prototypical measure was further revised based on the feedback received and resulting discussion (see Appendix 4).

Having revised the original prototype a second time, further feedback was sought from 25 AOD treatment clients and their respective clinicians. Participating clients were recruited from outpatient AOD treatment services located in Auckland and a methadone treatment service located in Christchurch. Participants were volunteers and all provided written informed consent (see Appendix 5). Participation involved completing the prototype and a related client or clinician questionnaire (see Appendix 6). The questionnaires sought information regarding clinicians' levels of comfort and inconvenience experienced when administering the tool, as well as their views on the tool's accuracy and the feasibility of its ongoing administration. Clients were asked about the clarity of the instructions provided for using the tool, whether they found any questions offensive or upsetting, and for their views on the tool's design and layout. Both clinicians and clients were asked to list the five most and least relevant questions and whether there were any additional questions that should be included. Feedback from participating clients and their respective clinicians was, as with the key informant data, recorded, tabulated (see Appendix 7) and discussed amongst project team members and the project advisory board. Resulting decisions led to further amendments and additions to Parts A and B of the prototype outcome measure (see Appendix 8). The resulting measure was considered the final prototype and it was this version that was subjected to psychometric testing (described below). From this point on, the measure will be referred to by its given name, the Alcohol and Drug Outcome Measure (ADOM).

## **2.2. STAGE TWO: PSYCHOMETRIC TESTING**

The aims of the psychometric testing stage were to assess the test-retest reliability (consistency of response in the absence of change), concurrent validity (comparability with existing, psychometrically sound instruments) and sensitivity to change (ability to reliably and accurately identify any change that may occur) of the ADOM. In order to ensure adequate statistical power for the respective analyses (described in 2.2.4), 50 new admissions to the participating AOD treatment services were required to complete the ADOM at three distinct time points: admission, 1-7 days post-admission and 4-6 weeks post-admission. In addition, the 50 participating clients were required to complete a suite of comparison measures (described in 2.2.3) at the first and third assessment point. The study setting and recruitment and assessment process are discussed in this section.

### **2.2.1. STUDY SETTING**

The study took place in seven outpatient community alcohol and drug counselling services in Auckland and the two Community Alcohol and Drug Service (CADS) and Methadone Treatment Programme (MTP) units in Christchurch.

#### **Auckland (Waitemata District Health Board)**

These services are primary providers of adult AOD assessments and treatment over the Auckland region, with one unit specifically focussing on supporting Pacific people and their aiga/fanau/magafaoa through a more holistic perspective and one other providing specialist methadone maintenance treatment (MMT) for opioid dependent clients. With the exception of the MMT service, length and treatment goals are negotiated on a case-by-case basis at the time of treatment entry. Appointments are typically one hour in length and are usually

delivered on a weekly basis (i.e. one 1 hour appointment per week). A higher or lower appointment frequency can be arranged to accommodate client needs as resource permits. The MMT service is more structured; aiming to engage clients for a sustained period of time during which clients are seen twice on the day of admission to the programme and again four days following admission. For the next three weeks, appointments are at least weekly, and then at least monthly for the next four months, and staff work in partnership with primary care general practitioners who provide ongoing care for stabilised clients.

#### **Christchurch (Canterbury District Health Board)**

The adult services comprise the generic CADS and the MTP. Both are providers of adult AOD services (>18 years) for European, Maori, Pacific people and clients of other ethnicities, with CADS providing specialist assessment and outpatient treatment and the MTP providing opioid substitution treatment (methadone maintenance treatment (MMT)). For CADS, appointments are typically 30-60 minutes, with goals and duration of treatment negotiated following assessment, and delivered on a one-to-two weekly basis, depending on acuity and complexity of clients needs. Treatment is frequently provided in collaboration with other regional services. The MTP is more structured aiming to engage clients for a minimum of three years and staff work in partnership with primary care general practitioners who provide ongoing care for stabilised clients. Clients are established on MMT in a standardised appointment approach similar to the Auckland MMT programme and both are in line with national guidelines.

Both the Auckland and Christchurch services employ clinicians from a range of professional backgrounds and operate according to a harm reduction approach. Cognitive behavioural and motivational interviewing-based approaches to AOD treatment intervention are encouraged and training and support to this effect are provided. However, treatment is non-standardised and clinicians undoubtedly employ an eclectic range of treatment approaches in accordance with their own training and as the situation demands.

#### **2.2.2. PARTICIPANT RECRUITMENT**

Adults accessing the specified Auckland or Christchurch AOD services for the first time, or after a significant break, were eligible to participate in the psychometric testing stage of the study. Participants were recruited via the referral and allocation procedures of the involved clinical service. Following training in research procedures and protocols, AOD clinicians choosing to take part in the project approached their allocated clients about the research in the course of their treatment at the outpatient treatment sites. Within the assessment/counselling process clinicians explained the project to their clients prior to data collection at a counselling session and again on the day of the research procedure.

Potential participants were advised the service was taking part in a national Ministry of Health project to find the best brief questionnaire to use in the evaluation of client outcomes/changes during treatment and that all new clients to the service were being invited to participate. Participant information sheets were provided for clients agreeing to take part, and written consent was gained (see Appendix 9). Participating clients were then asked to complete three different substance use questionnaires and two questionnaires on health and functioning in person, in collaboration with their clinician (described in part 2.2.3 below). Each of these questionnaires was to be completed as if a distinct task, with as little cross-questionnaire influence on answers as possible. Within seven days, participating clients completed the ADOM only, either again in person with their clinician or over the telephone. Four to six weeks following the initial interview, participants were asked to complete all five questionnaires once more, again in person with their clinician. Clinicians were asked to inform the research team when each set of questionnaires had been completed.

To acknowledge their time and input, participants were offered a petrol voucher at completion of the third interview. Individual feedback was also provided on treatment progress based on questionnaire responses.



### 2.2.3. COMPARATIVE MEASURES

In addition to the ADOM, the measures listed below were administered to participating clients at the first (treatment admission) and third (4-6 weeks post admission) assessment points (listed in Appendix 10). Only Parts A and B of the ADOM were administered at the second assessment point (2-7 days post admission).

- Degree of Drug use Index (DDI): A nine-item questionnaire (with demonstrated validity for Maori and non-Maori clients), designed to assess type, frequency and, in the case of alcohol, quantity of alcohol and other drug use over the past four weeks, including frequency of any injecting drug use (Deering, Sellman, Adamson, Horn, & Frampton, 2008).
- Timeline Follow Back (TLFB): The TLFB is a calendar-based method for assessing type, frequency and quantity of AOD use over a specified period. In this study, a reference period of 28 days was employed (Sobell & Sobell, 1996).
- Sections two, three and four of the Treatment Outcome Profile (TOP)(appendix 11): Thirteen yes/no, scale (0-20) or numeric (0-28) response questions that collectively examine injecting risk behaviour, criminal activity, and health and social functioning over a four week period (Marsden et al., 2008).
- Questions four and five of the SF-36 Health Survey (SF-36): Two multiple response questions, collectively comprising seven 'yes/no' items, that examine whether the client has experienced any number of specified problems with their work or other regular daily activities as a result of their physical health or emotional problems (Medical Outcomes Trust, 1994; Ware & Sherbourne, 1992).

The DDI and TLFB were employed as comparative measures for Part A of the ADOM, whilst the TOP and SF-36 questions were employed as comparative measures for Part B.

### 2.2.4. ANALYSIS

Test-retest reliability was assessed using Cohen's Kappa (k) for categorical and ordinal data and intraclass correlation coefficients (ICC) for continuous data. Concurrent validity was assessed using Cohen's Kappa for categorical data and Spearman's rank correlation coefficient (r) for continuous data. Sensitivity to change was assessed using paired sample t-tests and the Reliable Change Index (RCI) for continuous data, the McNemar test for categorical data and the Wilcoxin Signed Ranks test for ordinal data.

# 3. RESULTS

## 3.1. PARTICIPATION

A total of 63 AOD treatment clients successfully completed the baseline interview, 61 of whom completed the test-retest interview and 56 of whom completed the sensitivity to change interview. Participant characteristics are presented in Table 1. As can be seen, despite a small level of participant dropout (11 per cent), the characteristics of the sample remain consistent across each interview period<sup>1</sup>.

**Table 1. Participant characteristics across the three interview points†‡**

CHARACTERISTIC	SAMPLE		
	BASELINE (N = 63)	TEST-RETEST (N = 61)	CHANGE SENSITIVITY (N = 56)
GENDER: N (%)			
Male	37 (58.7)	35 (57.4)	30 (53.6)
Female	26 (41.3)	26 (42.6)	26 (46.4)
ETHNICITY: N (%)			
NZ European	39 (61.9)	37 (60.7)	35 (62.5)
Māori	11 (17.5)	11 (18.0)	10 (17.9)
Pacific Peoples	7 (11.1)	7 (11.4)	7 (12.5)
Other	6 (9.5)	6 (9.8)	4 (7.1)
RECRUITMENT LOCATION: N (%)			
Auckland	43 (68.3)	41 (67.2)	36 (64.3)
Christchurch	20 (31.7)	20 (32.8)	20 (35.7)
SUBSTANCE USE: N (%)§			
Alcohol	45 (72.6)	45 (75.0)	41 (74.5)
Cannabis	31 (49.2)	31 (50.8)	30 (53.6)
Amphetamine	13 (21.0)	13 (21.7)	11 (20.0)
Opioids	23 (36.5)	22 (36.1)	21 (37.5)
Sedative/tranquiliser	9 (14.3)	9 (14.8)	8 (14.3)
Other drug	3 (4.8)	3 (4.9)	1 (1.8)
Cigarettes/Nicotine	50 (82.0)	48 (81.4)	45 (83.3)
PRIMARY SUBSTANCE USE: N (%)¶			
Alcohol	27 (46.6)	26 (46.4)	23 (45.1)
Cannabis	5 (8.6)	5 (8.9)	5 (9.8)
Amphetamine	6 (10.3)	6 (10.7)	5 (9.8)
Opioids	22 (37.9)	21 (37.5)	20 (39.2)
Sedative/tranquiliser	1 (1.7)	1 (1.8)	1 (2.0)
Other drug	0 (0)	0 (0)	0 (0)
Cigarettes/Nicotine	6 (10.3)	5 (8.9)	5 (9.8)

†Based on data obtained at baseline assessment. ‡Listed frequencies and percentages based on valid data available for each measure, which may not always equal overall total. § Based on past 28 days. ¶ Defined as main substance of concern (participants could identify more than one).

<sup>1</sup> Statistical comparisons between the participants who completed all three assessments and those who did not were not conducted due to low sample size (56 vs.7).

## 3.2. TEST-RETEST RELIABILITY

Parts A and B of the pilot ADOM were re-administered to participants after a mean of 3.7 days (SD = 2.8; range 0–11 days).

### 3.2.1. ADOM PART A

The results of test-retest analyses for Part A of the ADOM are shown in Table 2. ICCs for the continuous ‘mean days used’ and ‘mean units on typical day’ measures were above 0.75 in every case, indicating excellent test-retest reliability (Fleiss, 1991). The ICC statistic was not computed for the ‘other drugs - mean days use’ (item 7) measure due to low sample size on this variable (only three participants reported ‘other drug’ use). For the categorical (yes/no) measures of ‘primary substance of concern’ and ‘shared injecting equipment’, a  $k$  of 0.60 or higher indicates good test-retest reliability, and a  $k$  of 0.40 may be considered a minimum acceptable value (Landis & Koch, 1977). Thus, test-retest reliability was very good for every categorical measure with the exception of ‘primary substance of concern – cigarettes/nicotine’ (0.49) and ‘shared injecting equipment’ (0.49). Nevertheless, test-retest reliability of the latter two measures did exceed the minimum acceptable value.

### 3.2.2. ADOM PART B

Kappa scores for each question listed in Part B of the ADOM were as follows: how often has your physical health interfered with your day-to-day functioning (0.56); how often has your psychological or mental health interfered with your day-to-day functioning (0.50); how often has your alcohol or drug use led to conflict with friends or family members (0.47); how often has your alcohol or drug use interfered with your work or other activities (0.45); how often have you engaged in paid employment, voluntary work, study, parenting or other care giving activities (0.63); how often have you had difficulties with housing or finding somewhere stable to live (0.49); apart from using illicit substances, how often have you been involved in any criminal or illegal activity (0.52). The use of Cohen’s Kappa on these variables should be considered a conservative measure of test-retest reliability as, unlike the binary ‘yes/no’ categorical measures used in Part A of the ADOM, the categorical measures used in Part B allowed a wider range of response (i.e. five response categories). Thus, the potential for disagreement between the test and retest score was greater. That the  $k$  for each question exceeded the minimum acceptable level (0.40), and in some cases exceeded or approached 0.60, may therefore be considered a reasonable outcome.

**Table 2. Item test-retest reliabilities for Part A of the ADOM**

MEASURE	N	TEST	RETEST	K	MEAN DIFFERENCE (95% CI)	ICC (95% CI)
<b>ALCOHOL</b>						
Mean days used $\pm$ SD	60	8.4 $\pm$ 10.1	7.2 $\pm$ 9.0		1.2 (-0.1, 2.4)	0.87 (0.80, 0.92)
Mean units on typical day $\pm$ SD	60	6.4 $\pm$ 8.3	5.8 $\pm$ 6.7		0.6 (10.5, 1.7)	0.84 (0.74, 0.90)
Primary substance: n (%)	49	22 (44.9)	22 (44.9)	0.92		
<b>CANNABIS</b>						
Mean days used $\pm$ SD	61	8.7 $\pm$ 11.8	7.9 $\pm$ 11.3		0.8 (-0.4, 1.9)	0.93 (0.88, 0.96)
Primary substance: n (%)	49	5 (10.2)	5 (10.2)	0.78		
<b>AMPHETAMINE-TYPE STIMULANTS</b>						
Mean days used $\pm$ SD	60	1.1 $\pm$ 3.3	0.9 $\pm$ 2.9		0.2 (0.1, 0.4)	0.97 (0.94, 0.98)
Primary substance: n (%)	49	5 (10.2)	4 (8.2)	0.88		
<b>OPIOIDS</b>						
Mean days used $\pm$ SD	61	8.3 $\pm$ 12.4	8.4 $\pm$ 12.2		-0.2 (-1.2, 0.9)	0.95 (0.92, 0.97)
Primary substance: n (%)	49	20 (40.8)	20 (40.8)	1.00		
<b>SEDATIVES/TRANQUILISERS</b>						
Mean days used $\pm$ SD	58	1.3 $\pm$ 4.6	0.7 $\pm$ 3.7		0.6 (0.1, 1.3)	0.84 (0.74, 0.90)
Primary substance: n (%)	49	1 (2.0)	1 (2.0)	1.00		
<b>CIGARETTES/NICOTINE</b>						
Mean units on typical day $\pm$ SD	58	14.3 $\pm$ 12.0	13.6 $\pm$ 12.4		0.7 (-0.3, 1.7)	0.95 (0.91, 0.97)
Primary substance: n (%)	49	4 (8.2)	7 (14.3)	0.49		
<b>INJECTED DRUG USE</b>						
Mean days used $\pm$ SD	55	7.8 $\pm$ 12.1	7.4 $\pm$ 11.6		0.4 (-0.2, 1.0)	0.98 (0.97, 0.99)
Shared equipment: n (%)	59	1 (1.7)	3 (5.1)	0.49		

### 3.3. CONCURRENT VALIDITY

#### 3.3.1. ADOM PART A

Spearman's rank correlation coefficients between comparable parts of ADOM Part A, the DDI and the TLFB were calculated based on data obtained at the baseline interview. This data is presented in Table 3. To assist in their interpretation, it should be noted that an  $r$  of between 0.10 and 0.29 indicates a weak relationship; 0.30 and 0.49, a moderate relationship; and an  $r$  between 0.50 and 1.0, a strong relationship (Cohen, 1988). As can be seen, all correlations are indicative of a strong relationship.

**Table 3. Correlations (Spearman's  $r$ ) between comparable parts of ADOM Part A, the DDI and the TLFB**

MEASURE	COMPARISON INSTRUMENT			
	TLFB		DDI	
	R	P	R	P
Mean days used				
Alcohol	0.96	<0.001	-	-
Cannabis	0.93	<0.001	0.97	<0.001
Amphetamine-type stimulants	0.93	<0.001	-	-
Opioids	0.98	<0.001	-	-
Sedatives/tranquilisers	0.90	<0.001	0.77	<0.001
Injected drug use	-	-	0.98	<0.001
Mean units on typical day				
Alcohol	0.94	<0.001	0.89	<0.001
Cigarettes/Nicotine	-	-	0.88	<0.001

The concurrent validity of the 'sharing injecting equipment' question on ADOM Part A could not be calculated due to the low response rate on this item.

#### 3.3.2. ADOM PART B

Correlations between comparable parts of ADOM Part B, Sections Three and Four of the TOP, and Questions Four and Five of the SF-36 were calculated, based on data obtained at the baseline interview. Findings are presented below.

Q12. How often has your physical health interfered with your day-to-day functioning (TOP: clients rating of physical health status,  $r = -0.36$ ,  $p < 0.01$ ; SF-36 Q4: cut down the amount of time spent working on other activities,  $r = 0.53$ ,  $p < 0.001$ ; accomplished less than you would like,  $r = 0.38$ ,  $p < 0.01$ ; were limited in the kind of work or other activities,  $r = 0.56$ ,  $p < 0.001$ ; had difficulty performing the work or other activities,  $r = 0.53$ ,  $p = < 0.001$ ).

Q13. How often has your psychological or mental health interfered with your day-to-day functioning (TOP: clients rating of psychological health status,  $r = -0.53$ ,  $p < 0.001$ ; SF-36 Q5: cut down the amount of time spent on work or other activities,  $r = 0.52$ ,  $p < 0.001$ ; accomplished less than you would like,  $r = 0.54$ ,  $p < 0.001$ ; didn't do work or other activities as carefully as usual,  $r = 0.55$ ,  $p < 0.001$ ).

Q14. How often has your alcohol or drug use led to conflict with friend or family members (TOP: clients rating of overall quality of life,  $r = -0.02$ ,  $p = 0.86$ ).

Q15. How often has your alcohol or drug use interfered with your work or other activities (SF-36 Q4: cut down the amount of time spent working on other activities,  $r = 0.41$ ,  $p = 0.001$ ; accomplished less than you would like,  $r = 0.24$ ,  $p = 0.06$ ; were limited in the kind of work or other activities,  $r = 0.38$ ,  $p < 0.01$ ; had difficulty performing the work or other activities,  $r = 0.40$ ,  $p = <0.01$ ).

Q16. How often have you engaged in paid employment, voluntary work, study, parenting or other care giving activities (TOP: days paid work,  $r = 0.56$ ,  $p < 0.001$ ; days attended college or school,  $r = 0.08$ ,  $p = 0.55$ ).

Q17. How often have you had difficulties with housing or finding somewhere stable to live (TOP: acute housing problem,  $r = 0.60$ ,  $p < 0.001$ ; at risk of eviction,  $r = 0.16$ ,  $p = 0.21$ ).

Q18. How often have you been involved in any criminal or illegal activity (TOP: shoplifting,  $r = 0.18$ ,  $p = 0.16$ ; drug selling,  $r = 0.41$ ,  $p = 0.001$ ; property theft,  $r = 0.21$ ,  $p = 0.1$ ; assault,  $r = 0.18$ ,  $p = 0.17$ )<sup>2</sup>.

As can be seen, strong relationships were generally identified between ADOM Part B questions 12 and 13 and the comparable SF-36 measures. The relationship between these two questions and the comparable TOP measure was less strong and inverse; although the latter was to be expected given the scoring system of the respective questionnaires (i.e. a negative response equals a higher score on the ADOM question, but a lower score on the TOP). The weaker relationship between the ADOM/TOP questions, as compared to the ADOM/SF-36 questions, is also likely to reflect the fact that the TOP physical/psychological health questions pertained to generic feelings of ill-health as opposed to the consequences of ill-health (as in ADOM/SF-36).

The relationship between ADOM Part B question 14 and the comparable TOP question was weak and non-significant. This result should be interpreted with some caution, however, as the questions were distinctly different (i.e. conflict with family members vs. quality of life). The failure to include a more appropriate comparison measure for this question may be considered a limitation of this study.

The relationship between ADOM Part B question 15 and the comparable SF-36 measures were predominantly in the moderate range (0.30 – 0.49) and all statistically significant.

The relationship between ADOM Part B questions 16 to 18 and the comparable TOP measures varied between the strong (0.50 – 1.0) and weak (0.10 – 0.29) range. As the TOP measures were more specific than their ADOM counterparts, then it is likely that the measures with the stronger correlation are indicative of the factors that underlay a positive response to the respective ADOM question (e.g. response to ADOM Part Q16, Q17 and Q18 may have been largely based on days in paid work, acute housing problems and drug selling, respectively).

Overall, then, the correlation between ADOM Part B measures and the comparable TOP and SF-36 questions were variable. Nevertheless, a large number of strong and moderate correlations were reported and the weaker correlations generally resulted when the level of ‘comparability’ of the respective measures was in question (due to focus or specificity).

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<sup>2</sup> Correlations were not conducted with the ‘vehicle theft’ and ‘fraud’ questions listed on the TOP measure as no participant provided a positive response to these questions (i.e. there were no comparison data available).

## 3.4. SENSITIVITY TO CHANGE

All baseline measures were re-administered to participants after a mean of 33.9 days (SD = 10.7; range 18 – 86 days).

### 3.4.1. ADOM PART A

The results of a series of paired samples t-tests comparing baseline scores with follow-up scores on a range of ADOM Part A questions are presented in Table 4. Table 4 also presents the percentage of participants whose reported change (between baseline and follow-up) was greater than the Reliable Change Index (RCI). The RCI% figure represents the percentage of participants who can be said to have significantly improved at a probability of less than 5 per cent (i.e. we can be 95 per cent certain that the reported change was not due to ‘chance’ alone).

**Table 4. Sensitivity to change for ADOM Part A scaled items**

MEASURE	INTERVIEW		P	RCI%
	TEST	FOLLOW-UP		
Mean days used ± SD				
Alcohol	8.2 ± 9.9	5.8 ± 8.0	0.01**	41.8
Cannabis	9.0 ± 11.9	7.6 ± 11.4	0.11	32.1
Amphetamine-type stimulants	0.8 ± 2.3	0.6 ± 1.8	0.12	16.4
Opioids	9.0 ± 12.7	2.5 ± 6.6	0.01**	28.6
Sedatives/tranquilisers	1.4 ± 4.7	0.4 ± 1.5	0.05*	14.3
Injected drug use	9.1 ± 12.7	2.6 ± 6.9	0.01**	30.0
Mean units on typical day ± SD				
Alcohol	5.9 ± 6.8	3.9 ± 4.5	0.04*	49.1
Cigarettes/Nicotine	14.9 ± 11.8	13.5 ± 11.8	0.09	38.9

As can be seen, statistically significant reductions in mean days of use were reported for alcohol, opioids, sedatives/tranquilisers, and injected drug use. A statistically significant reduction was also reported in the mean number of standard drinks consumed per drinking day. The percentage of participants whose change was greater than the RCI ranged from a low of 14.3 (mean days use sedatives/tranquilisers) to a high of 49.1 (mean number of standard drinks consumed per drinking day).

Table 5 presents the results of a series of paired samples t-tests comparing baseline scores with follow-up scores on a range of TLFB questions for comparative purposes. Table 5 also presents the percentage of participants whose reported change (between baseline and follow-up) was greater than the RCI. As can be seen, statistically significant reductions in mean days of use were reported for opioids and sedatives/tranquilisers. This was consistent with the ADOM Part A data; however, unlike the ADOM Part A data, statistically significant reductions were not identified for mean days of alcohol use or mean number of standard drinks consumed per drinking day. The RCI findings suggest these discrepancies may be a statistical artefact: the percentage of participants whose change was greater than the RCI was highly consistent between the measures on all items, including the two alcohol-related items.

**Table 5. Sensitivity to change for comparative TLFB scaled items**

MEASURE	INTERVIEW		P	RCI%
	TEST	FOLLOW-UP		
Mean days used ± SD				
Alcohol	7.3 ± 9.3	6.5 ± 8.6	0.38	42.9
Cannabis	8.5 ± 11.4	6.9 ± 11.0	0.07	32.1
Amphetamine-type stimulants	0.7 ± 2.0	0.4 ± 1.5	0.20	19.6
Opioids	9.5 ± 12.8	2.7 ± 7.2	0.01**	32.1
Sedatives/tranquilisers	1.3 ± 4.2	0.3 ± 1.7	0.01**	14.3
Mean units on typical day ± SD				
Alcohol	5.6 ± 7.1	4.4 ± 5.1	0.23	50.0
Cigarettes/Nicotine	10.5 ± 12.2	10.4 ± 12.5	0.97	37.8

Mean days of injected drug use is not presented on this table, as a comparative measure was not recorded on the TLFB.

### 3.4.2. ADOM PART B

McNemar tests were conducted to compare possible changes (between baseline and follow-up) in reported primary substances of concern on the ADOM Part A. No statistically significant changes were identified with respect to the frequency with which each substance was reported as being of primary concern. Change was not expected on this dimension. Thus, these findings are consistent with expectation. Changes in the frequency with which sharing of injecting equipment was reported were not examined as there were too few cases available for analysis.

The results of a series of Wilcoxin Signed Ranks tests comparing baseline scores with follow-up scores on ADOM Part B questions are presented in Table 6. Table 6 also presents the percentage of participants whose response changed by one or more categories between baseline and follow-up (% Change). As can be seen, statistically significant changes were reported for the 'physical health' and 'psychological health' questions. The percentage of participants whose response changed by one or more categories between baseline and follow-up ranged from a low of 17.9 for the 'housing difficulties' question to a high of 81.8 for the 'psychological health' question.



**Table 6. Sensitivity to change for ADOM Part B items**

QUESTION	PARTICIPANT RESPONSE					P	% CHANGE <sup>†</sup>
	NEVER	< WEEKLY	1-2 X WEEK	3-4 X WEEK	DAILY		
Q12. PHYSICAL HEALTH							
Baseline: n (%)	17 (30.9)	13 (23.6)	9 (16.4)	5 (9.1)	11 (20.0)	0.02*	63.6
Follow-Up: n (%)	22 (39.3)	15 (26.8)	13 (23.2)	5 (8.9)	1 (1.8)		
Q13. PSYCHOLOGICAL HEALTH							
Baseline: n (%)	10 (18.2)	12 (21.8)	8 (14.5)	7 (12.7)	18 (32.7)	0.01*	81.8
Follow-Up: n (%)	20 (35.7)	15 (26.8)	12 (21.4)	1 (1.8)	8 (14.3)	*	
Q14. FAMILY/FRIEND CONFLICT							
Baseline: n (%)	22 (39.3)	16 (28.6)	7 (12.5)	3 (5.4)	8 (14.3)	0.18	57.1
Follow-Up: n (%)	36 (64.3)	13 (23.2)	5 (8.9)	0 (0)	2 (3.6)		
Q15. WORK/ACTIVITY INTERFERENCE							
Baseline: n (%)	25 (45.5)	4 (7.3)	8 (14.5)	6 (10.9)	12 (21.8)	0.16	49.1
Follow-Up: n (%)	33 (60.0)	10 (18.2)	8 (14.5)	2 (3.6)	2 (3.6)		
Q16. ENGAGED IN WORK/OTHER ACTIVITY							
Baseline: n (%)	11 (19.6)	3 (5.4)	4 (7.1)	8 (14.3)	30 (53.6)	0.50	37.5
Follow-Up: n (%)	10 (17.9)	1 (1.8)	12 (21.4)	6 (10.7)	27 (48.2)		
Q17. HOUSING DIFFICULTIES							
Baseline: n (%)	48 (85.7)	3 (5.4)	2 (3.6)	1 (1.8)	2 (3.6)	0.94	17.9
Follow-Up: n (%)	49 (87.5)	3 (5.4)	1 (1.8)	1 (1.8)	2 (3.6)		
Q18. ILLEGAL ACTIVITY							
Baseline: n (%)	38 (67.9)	5 (8.9)	6 (10.7)	2 (3.6)	5 (8.9)	0.47	32.1
Follow-Up: n (%)	47 (83.9)	3 (5.4)	5 (8.9)	1 (1.8)	0 (0)		

<sup>†</sup> Defined as the percentage of participants whose response changed by one or more categories (e.g. from 'never' to '<weekly') between baseline and follow-up (inclusive of both positive and negative change).

Table 7 presents the results of a series of paired samples t-tests comparing baseline scores with follow-up scores on a range of TOP questions (continuous data) for comparative purposes<sup>3</sup>. As can be seen, statistically significant reductions in mean ratings were reported for psychological health, physical health and overall quality of life. The reported improvement in psychological and physical health is consistent with the ADOM Part B data. The reported improvement in overall quality of life is not directly comparable with any ADOM Part B questions, but is suggestive of improvement in multiple life areas. The failure to identify significant differences in reported mean days of shoplifting, drug selling, paid work, or school attendance, whilst a negative result, is consistent with ADOM Part B data. As statistically significant changes were not detected by either ADOM Part B or TOP on these questions, it raises the possibility that six weeks may not have been a long enough period to reliably measure sensitivity to change on these domains (i.e. change on these domains may occur over a longer period relative to the other questions).

Table 7. Sensitivity to change for comparative TOP scale items

MEASURE	INTERVIEW		P
	TEST	FOLLOW-UP	
Mean days (0-28)			
Shoplifting	0.02 ± 0.14	0.04 ± 0.27	0.32
Drug selling	1.1 ± 4.4	1.1 ± 4.5	1.00
In paid work	7.8 ± 9.3	7.2 ± 9.5	0.56
Attending school	0.8 ± 3.3	0.6 ± 2.8	0.42
Mean rating (0-20)			
Psychological health	11.0 ± 5.5	12.6 ± 5.1	0.02*
Physical health	11.5 ± 4.7	13.8 ± 4.3	0.01**
Overall quality of life	10.9 ± 5.0	14.6 ± 3.9	0.01**

As a means of further comparison, McNemar tests were conducted to compare possible changes (between baseline and follow-up) in participant SF-36 responses. Statistically significant changes were identified on three of the four questions pertaining to physical health: cut down the amount of time spent on work or other activities ( $p = 0.03$ ), accomplished less than you would have liked ( $p = 0.001$ ), had difficulty performing work or other activities ( $p = 0.03$ ). Similarly, statistically significant changes were identified on two of the three questions pertaining to psychological health: accomplished less than you would like ( $p = 0.04$ ), didn't do work or other activities as carefully as usual ( $p = 0.008$ ). In all cases, the reported change was generally in a positive direction. These findings are consistent with the ADOM Part B data (in regards to the physical and psychological health questions).

<sup>3</sup> Changes in the frequency of response to the categorical TOP questions (i.e. yes/no) were not conducted due to the low number of participants selecting a 'yes' response at either baseline or follow-up (maximum of 2 'yes' responses on any one question).

# 4. DISCUSSION AND RECOMMENDATIONS

This project aimed to develop and test an outcome measurement tool potentially suited for routine use in the New Zealand AOD treatment sector. It has resulted in the creation of the Alcohol and Drug Outcome Measure (ADOM), a brief two part questionnaire. In this chapter, the project limitations will be discussed, the psychometric properties of the ADOM will be briefly overviewed and its potential utility as a routine outcome measure will be considered. Recommendations will then be made as to whether the ADOM should be employed in the New Zealand AOD treatment sector. Recommendations as to how the ADOM should be implemented, if this decision were to be made, are presented in Section 5.

## 4.1. PROJECT LIMITATIONS

The process by which the ADOM was developed had many strengths: the questionnaire content was informed by extensive consultation with a wide range of AOD treatment stakeholders (inclusive of the ADOPT Part I study); clients of Maori and Pacific Island ethnicity were well represented in the statistical analyses; testing was conducted in 'real world' treatment services under 'real world' conditions; and there was minimal dropout in the psychometric testing sample. Nevertheless, a number of weaknesses are also acknowledged. These include: the psychometric testing sample was not obtained by random selection; not all AOD treatment modalities were represented in the psychometric testing sample (e.g. inpatient detoxification); comparison measures used for Part B of the ADOM were not always well matched; and sensitivity to change was measured after a relatively brief period post-admission. 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.

## 4.2. PSYCHOMETRIC PROPERTIES OF THE ADOM

The psychometric properties of the ADOM typically ranged from very good to satisfactory. In short, analyses of the test-retest reliability, concurrent validity and sensitivity to change of Part A of the ADOM consistently produced excellent results whereas the comparable test results for Part B of the instrument were generally above minimum acceptable standards, but rarely outstanding. The less impressive performance of Part B of the ADOM was not unexpected. As discussed in the results section, Cohen's Kappa was a more conservative measure of test-retest reliability in the context of the Part B questions, as compared to the Part A questions, due to the greater number of response possibilities (thereby providing more opportunity for disagreement). Tests of concurrent validity and sensitivity to change were also hampered due to the imperfect match between a number of the ADOM Part B questions and the respective comparison measures. Matching of the Part A questions was consistently better, due in large part to the greater objectivity of the Part A questions and the wider availability of suitable comparison measures.

## 4.3. POTENTIAL UTILITY OF THE ADOM

Based on the psychometric data it is reasonable to conclude that ADOM Part A has excellent potential as a measure of type and frequency of AOD use. The potential utility of ADOM Part B as a measure of AOD-related psychosocial issues is less certain. Confidence in Part B could be increased if those questions with less impressive statistics were removed from the instrument. Candidate questions for removal, due to their especially low concurrent validity and sensitivity to change, might include: 'how often has your alcohol or drug use led to

conflict with friend or family members', 'how often have you had difficulties with housing or finding somewhere stable to live', and 'how often have you been involved in any criminal or illegal activity'. However, poor test results in these areas were likely to be the result of matching issues (as discussed above) and, in the case of the housing difficulty and illegal activity questions, irrelevance to the majority of clients who participated in this trial. It is also worth highlighting that whilst an improvement on key outcome measures is frequently evidenced early in treatment for many clients, for others stabilisation and/or improvement may happen more slowly. Thus, progress should not always be expected in the early stages of treatment. Outcome measurement remains useful in this context as, if no change is identified, then the treatment plan can be adapted as required (Teesson, Clement, Copeland, Conroy, & Reid, 2000). All of these factors suggest that it may be premature and/or ill-considered to remove questions from ADOM Part B at this time.

Having said this, thought could be given to employing a refined version of the ADOM as a core outcome measure in the AOD sector with additional brief modules for particular client groups. For example, injecting drug use, stability of housing and criminal activity are highly relevant outcome measures for clients who present for treatment with dependence on illegal substances and are typically included in brief outcome measures targeted for use with MMT clients and drug users e.g. Deering et al., 2008 (from New Zealand); Marsden et al., 2008 (from the UK). Nevertheless, these measures may be less relevant to clients presenting to outpatient treatment services for alcohol-related problems and could potentially be excluded from use with this client population. If thought were to be given to this approach then four outcome domains that should be maintained in a core generic measure, considered important by the project team due to their traditional relevance to addiction treatment and in line with a holistic health and wellbeing focus (McLellan, McKay, Forman, Cacciola, & Kemp, 2005), would include: (1) reduction in alcohol and other drug use; (2) quality of life improvements in physical and mental health; (3) improvement in social function (e.g. employment, vocational courses, voluntary work parenting, study, family and social relationships; and (4) reductions in threats to public safety (e.g. drink driving, physical violence, spread of infectious diseases).

In reflecting on the potential utility of ADOM Part B, it is also worth considering the practical realities of routine outcome measurement in a clinical environment. If the aim is to produce a single outcome measure for use across all AOD treatment modalities then a number of 'tradeoffs' need to be carefully considered in regard to implementing and sustaining the use of a brief, generic client outcome measure across a range of client groups in real life clinical settings. As Part I of the ADOPT project identified, 'buy in' from clinicians and clients is of critical importance which therefore places a high priority on feasibility characteristics (Slade, Thornicroft, & Glover, 1999). Typically, instruments that score high in regard to psychometric properties of reliability and validity are low on clinical feasibility and vice versa. On the one hand, brief questionnaires administered as a structured interview with the flexibility to enable more in depth exploration or digression as required, may not be as psychometrically sound as longer instruments. On the other hand, they may have good clinical utility and therefore provide a degree of measurement precision that is realistic and clinically useful and which can lead to improvements in the quality of care (Berwick et al., 1991).

As a final point prior to drawing recommendations from the study results, it is worth noting that both Parts A and B of the ADOM are reliant on patient report. Thus, the accuracy of ADOM-derived data will always be dependent on the willingness of AOD treatment clients to provide honest and accurate responses. Whilst it would be naïve to assume all clients would be willing to do this (e.g. clients on parole may be less willing to provide honest answers if, in so doing, this were to admit to violating a parole condition), research suggests the self-report data of AOD treatment clients is generally reliable (Del Boca & Drakes, 2003; Gruenewald & Johnson, 2006). Furthermore, if the confidentiality of client responses were assured, as is generally the case, and if the benefits in providing an honest response were explained, then the accuracy of the resulting data is likely to improve. Certainly, any benefits obtained by introducing more objective measures of AOD treatment use or consequence (e.g. urine sample, collateral reports) alongside the ADOM would be off-set by the associated cost and inconvenience.

## 4.4. RECOMMENDATIONS

The project team make the following recommendations, based on the outcomes of this project, and in light of the project limitations and other considerations discussed above.

1. ADOM Part A should be seriously considered for use as a routine outcome measure across the New Zealand AOD treatment sector.
2. ADOM Part A should be considered for use as a routine outcome measure across the New Zealand mental health sector.
3. ADOM Part B should be made available to New Zealand AOD treatment services for use at their discretion.

Recommendations one and two are made on the basis of the psychometric qualities of ADOM Part A, the recognised need and demand (in the AOD sector at least) for a standardised and routinely administered measure of AOD use, and the high level of substance misuse issues amongst clients attending mental health services. Widespread use of ADOM Part A in both the AOD and mental health sectors would provide valid and reliable AOD use data, useful for both clinical decision making and local health service planning. Implementation of ADOM Part A in both the AOD and mental health sectors would also help ensure a consistency of approach, and a better quality of treatment, across related treatment pathways. It is noted, however, that ADOM Part A has not been validated for use in a mental health treatment context at this point in time. Thus, implementation in this sector may be contingent upon procuring supportive psychometric evidence from an appropriate testing process in the first instance. This could involve a replication of the testing process described in this report (with mental health services substituted for AOD services).

Recommendations one and two are also made on the understanding that the limitations in using aggregated data from an instrument such as ADOM Part A as a measure of treatment or service performance, or to inform health service planning, are well understood. 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, in conjunction with the brevity of the ADOM, may undermine the reliability of aggregated data (these issues are discussed more fully in the next chapter). Accordingly, ADOM-derived aggregate data should always be interpreted with a degree of caution.

Recommendation three is made on the basis that, as it currently stands, the psychometric properties of ADOM Part B are open to challenge and its overall relevance may vary according to AOD treatment modality. Accordingly, routine implementation across the AOD treatment sector may be inappropriate at this stage, especially if the resulting information were to be used to measure treatment or service performance. Nevertheless, the psychometric properties of Part B were largely adequate and the questions do span a wide range of dimensions, most of which are relevant to most AOD treatment modalities. There is also a dearth of alternative measures that could be employed in its place (that meet expectations of brevity and that are completed collaboratively between client and clinician). Thus, ADOM Part B may represent one of the best currently available options for briefly assessing outcomes in the specified areas and it is on this basis that it should be made available to services for clinical use if they so desire. If ADOM Part B were to be offered for use to AOD treatment services, then its limitations should be clearly explained as should its functionality and wider utility (i.e. a tool to assist clinical decision making at the level of the client/clinician relationship).

In recommending the use of ADOM Part B be left to provider discretion, the project team acknowledge the aim – to develop an outcome measurement tool potentially suited for routine use in the New Zealand AOD treatment

sector – has only been partially achieved. Thus, consideration will need to be given as to whether ADOM Part A will satisfy the needs of the AOD treatment sector and the Ministry of Health with respect to routine outcome measurement or whether effort is put into refining ADOM Part B (possibly along the lines suggested earlier), redeveloping and retesting ADOM Part B, or whether an alternative instrument is employed. If ADOM Part B were to be redeveloped then those questions that did not test well in this study could potentially be reworded. One suggestion would be to increase the number of illegal activity examples listed in item 18. A greater range of examples might make this question more relevant to a greater number of AOD treatment clients, potentially increasing its utility and psychometric properties. Testing of ADOM Part B might also be improved if a longer timeframe for the sensitivity to change analysis was employed (e.g. 8-12 weeks) or by using alternative comparative measures (testing of item 14, in particular, was compromised by the lack of a suitable comparison measure).

A number of new AOD outcome measures have been reported in the published literature since the original ADOPT report was commissioned, including the TOP (Marsden et al., 2008) (items from which served as comparison validation items in this study) the Brief Treatment Outcome Measure (BTOM) (Lawrinson, Copeland, & Indig, 2005) and the Alcohol Treatment Outcome Measure (ATOM) (Simpson, Lawrinson, Copeland, & Gates, 2009). It is therefore possible that an alternative instrument suited to outcome monitoring in the New Zealand context may be available. However, a review of these instruments suggests they are too specific (to either a single substance or treatment modality) to be employed as a generic outcome measure or, as with ADOM Part B, may contain questions irrelevant to a large number of New Zealand AOD treatment clients. Thus, the suitability of any outcome measure recently published, in the context of the New Zealand AOD treatment sector, would need to be carefully assessed before any conclusions as to their utility could be drawn.

Finally, given a number of outcome-related measures are being developed and/or implemented across the AOD and mental health sectors, then it may also be the case that a potential alternative to ADOM Part B will present itself. However, any such measure would need to be brief, suited for use with a diverse array of client groupings and acceptable to AOD treatment providers and their clients. Thus, further consultation would need to be undertaken if the use of an alternative measure were to be considered.

# 5. IMPLEMENTATION

This section details a number of recommendations for the successful implementation of the ADOM. It should be noted these recommendations apply irrespective of whether Part A, Part B, or both Parts A and B of the ADOM were to be implemented and/or whether use of the instrument was voluntary or mandated. Thus, even though the project team only recommend the routine implementation of ADOM Part A, a distinction between ADOM Parts A and B is not made in this chapter. The implementation recommendations are also framed in an AOD treatment context, yet they would equally apply in a mental health context.

The listed recommendations include, but are not limited to, the original project aim of detailing probable information system requirements. As a general rider to the following discussion, it is the opinion of the project team that any future implementation of the ADOM requires detailed planning specific to the New Zealand AOD treatment context. Ideally, any implementation plan would be collaborative with the sector and include a smaller scale, adequately resourced pilot prior to larger scale implementation and subsequent evaluation. The pilot and larger scale implementation phases of the ADOM could be conducted concurrently with other instruments (if more than one instrument was being considered for implementation) to reduce the overall cost; however, this should not be conducted as part of a generic mental health implementation policy (i.e. an AOD-specific approach is required).

## 5.1. TARGET SERVICES

The ADOM was intended for use with adult (18 years plus) clients attending mainstream: outpatient AOD treatment services, residential AOD treatment services or opioid substitution treatment programmes. However, how the measure is used in each of these settings may vary (discussed in part 5.3 below). The ADOM was not specifically designed for use in specialist Maori, Pacific Island, Asian or other culturally specific services, although it could potentially be employed in these settings if considered appropriate by the respective stakeholders. The ADOM has not been validated for use with child and adolescent (<18 years), or non-English speaking clients. Thus, the psychometric properties of the measure, as described in this report, may not apply if it were to be administered to either of these groups.

The ADOM was designed for possible use in the wider mental health sector. Having said this, in addition to the limitations described above (i.e. may not be suited for culturally specific services or with child/adolescent or non-English speaking clients), the instrument has not been validated with clients of non-AOD specific treatment services. It is also possible the content of ADOM Part B may be less relevant to mental health treatment clients, as compared to their AOD treatment counterparts, and/or that the Part B content may already be captured by existing mental health specific outcome measures. To the best of our knowledge there are no existing measures currently employed in the mental health sector that capture content included in ADOM Part A (type and frequency of AOD use). The high rate of substance misuse reported by clients accessing mental health services (Sinclair, Latifi, & Latifi, 2008; Weaver et al., 2003) suggests data derived from ADOM Part A may be especially useful for treatment planning across this sector. Hence the recommendation that ADOM Part A be considered for use among mental health services. The benefits, if any, of using ADOM Part B in a mental health service context should be clearly established before consideration is given to its implementation.

## 5.2. METHOD OF ADMINISTRATION

In its capacity as a clinical decision making tool (the tool has multiple potential functions, see part 5.5 below); the ADOM was designed to provide a means for a structured interview, with opportunity for discussion as part of regular treatment, and to be completed in a collaborative manner between client and clinician. Ideally, the clinician would work through each question with their client, in the specified order. In many cases, the client may be able to provide a prompt response with minimal guidance. In other cases, assistance may be required (e.g. with memory recall or decision making). Under no circumstances should a clinician complete the ADOM independent of client input (i.e. it was not designed to be a clinician-rated measure). Equally, the ADOM should not be completed by a client independent of their clinician (i.e. it was not designed to be self-administered). If client/clinician collaboration is not possible, then the ADOM should not be completed.

In its capacity as an outcome measure, the ADOM could be administered by telephone during the course of a treatment episode or post-treatment discharge. Information collected during the course of a treatment episode could also be used to inform clinical decision making, assuming the client returns for another appointment.<sup>4</sup> A recent survey suggests many AOD treatment clients would support telephone-based data collection post-treatment discharge (Pulford, Black, Wheeler, Sheridan, & Adams, In press) and it is common practice for AOD treatment clinicians/services to contact consenting clients by telephone during the course of a treatment episode. Furthermore, many AOD treatment staff support the notion of maintaining contact with consenting clients post discharge and telephone-based contact is considered desirable in this regard (Pulford, Black, Wheeler, Sheridan, & Adams, 2007). Nevertheless, if clinicians were required to routinely collect client outcome data via telephone during the course of a treatment episode and/or post-treatment discharge, without additional resource being provided to compensate for the resulting impact on their work load, then it is highly likely that data collection would be sporadic at best. Telephone-based outcome data collection is perhaps best conducted via a specialist service, a good example of which previously operated in the problem gambling treatment sector (detailed in ADOPT Part I, Deering et al., 2004).

It is the recommendation of the project team that priority be given to in-person administration of the ADOM during the course of a scheduled treatment appointment, to support its function as a clinical decision making tool. The collection of post-treatment outcome data, from consenting clients, by a specialist telephone-based service should also be considered (albeit as a secondary, rather than primary, source of data collection).

## 5.3. TIMING OF ADMINISTRATION

From ADOPT Part I, the ADOM was initially designed to be administered at treatment admission, at least three-monthly intervals thereafter and/or at treatment discharge. In this study, the reference period of one month was tested. It was considered that the ADOM may also be used to measure treatment outcome following service exit (e.g. at 3, 6, and 12-months post-discharge). Having said this, careful consideration needs to be given as to firstly, whether the measure is (or is expected to be) administered this way in all settings and secondly, with all AOD clients. Concern in this regard is largely grounded in the realities of AOD service utilisation. AOD clients have variable patterns of treatment duration. For example, some clients may attend once only, others for several weeks or months and others such as those receiving opioid substitution treatments (primarily MMT at this point) for many years. In addition, New Zealand services span rural and urban, outpatient, day patient and residential, general or specialised (such as MTPs), culturally-specific, as well as operating under varying philosophies and policies; all factors which are likely to influence duration of treatment. Furthermore, service records indicate many treatment episodes, of both brief and extended duration, end as the result of an unplanned discharge (CADS, 2007, 2008). Evidence would also suggest the decision to exit treatment, in cases of unplanned discharge,

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<sup>4</sup> Outcome data obtained from clients post treatment discharge could not be used to inform clinical decision-making, the core function of the ADOPT instrument.



is often made outside the clinical setting and after what would prove to be the final appointment has been attended (Pulford, Adams, & Sheridan, In press).

Due to the range of attendance and exit patterns, if the ADOM is routinely administered to all outpatient AOD treatment clients at the point of service entry then it should be expected: that many will not remain in treatment long enough to complete a three-month follow-up (in-person), and/or that routine administration at discharge will frequently be unachievable (in-person) given the high rates of unplanned discharge in some settings and within some client groups. It is of particular interest in this regard that McLellan et al., (2005), in arguing for a shift in the evaluation of addiction treatment from retrospective follow-up to concurrent recovery monitoring, suggested the use of brief outcome measures on a weekly basis early in treatment moving to perhaps once a month for clients in longer term treatment or later phases of medication maintenance treatment (e.g. methadone maintenance treatment). This suggestion was based on the assumption of an ongoing relationship between client and provider or clinician and that the client is an outpatient.

Repeat in-person measures may be easier to obtain from clients in residential treatment services or receiving opioid substitution treatment such as MMT, although these service types present their own challenges. In regard to MMT, validity of self report of behaviours for which clients perceive negative treatment sanctions may ensue if they are honest, for example about their drug use, is an issue that requires further consideration (Deering et al., 2008). In respect to residential treatment services, in the final report for ADOPT Part I it was noted that administering an outcome measure at the point of service discharge in residential treatment settings would be “inadequate as it [the resulting data] will not be able to represent a consumer’s true propensity to use substances at that point” (Deering et al., 2004, p. 72). Thus, it was recommended that in residential services the discharge measure should be replaced by a post-discharge measure. Further to this, it is the recommendation of the current project team the timing of outcome measurement, if the ADOM were to be introduced, is considered independently for each of the main AOD treatment modalities.

It is acknowledged that a telephone-based system of outcome measurement (as opposed to the recommended in-person, in-treatment method) could potentially overcome many of the issues detailed above. However, data could only be obtained from consenting clients with reliable telephone access and, given the high likelihood that many clients will not return for treatment post-telephone contact, the opportunity to inform clinical decision making based on the data obtained will be minimised.

## 5.4. SCORING

All questions listed on the ADOM should be completed with all clients with whom it is administered. However, if a question or questions is/are not answered then this does not invalidate the result. Questions that are not answered simply need to be scored as ‘missing data’ when the results are entered into the respective database.<sup>5</sup> Nevertheless, if any questions on the ADOM are not asked then the resulting information may not accurately represent a client’s AOD use or associated problems, it may not be possible to monitor change over time for the individual client concerned, and confidence in aggregated data may be undermined.

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<sup>5</sup> It is important that ‘0’ scores are not mistaken for missing data or that a 0 score is not entered when a question goes unanswered.

## 5.5. FUNCTIONALITY

As indicated, the ADOM was primarily designed as a client outcome monitoring tool capable of: informing clinical decision making in partnership with clients and, where possible, significant others; contributing to the formulation of an individualised AOD treatment plan; and, via its outcome monitoring function, informing amendments to this plan over the course of a treatment episode. Accordingly, it is essential that current and previous ADOM results are readily accessible to the client and their clinician. Again, this view is compatible with that of McLellan et al., (2005). Any delay in accessing ADOM results will lower its utility as a clinical decision making tool, and the longer the delay the lower the utility in this regard. The requirement for efficient data reporting has implications for data collection and information management systems. These issues are discussed in section 5.6 below.

In line with expectations of MH-SMART, routine use of the ADOM (assuming a supportive information technology infrastructure is in place) would allow AOD treatment services to provide aggregated data on their client-base, inclusive of outcome information (in-treatment and/or post-treatment depending on the data collection protocols and systems). Whilst this function has the potential to provide useful information for health service planning at both an organisational and sector level, the utility of the ADOM is limited in this regard. As previously stated the characteristic service utilisation patterns of AOD treatment clients suggest varying treatment durations and clearly there are varying client groups and differing levels of acuity and complexity. Thus, aggregated data is highly likely to represent only a proportion of service users and, without consideration of caseload mix and other treatment utilisation and programme factors, may not provide an accurate indication of service or treatment performance.

The ADOM is brief in content and broad in focus; it provides a small amount of information in a range of areas. This characteristic, together with the issues raised above, highlight that any indication of service or treatment performance obtained from ADOM-derived data at levels of aggregation above individual client outcomes monitoring or individual service quality improvement planning would not substitute for well designed research-based treatment outcome evaluations. Accordingly, it would be unwise and unhelpful to inform health service planning, at either an organisational or sector level, on the basis of aggregated ADOM data alone. Having said this, data obtained from ADOM Part A at the point of service entry (or the early stages thereof) could usefully provide a detailed description of the type and frequency of AOD consumption amongst AOD clients and trends over time. As this data is collected at service entry it is also more likely to be representative of a larger proportion of AOD treatment clients.

## 5.6. INFORMATION SYSTEM REQUIREMENTS

A number of recommendations relating to information system/data management issues were detailed in ADOPT Part I (Deering et al., 2004) including: comment on incorporating an AOD-specific outcome measure in the MH-SMART system, collection occasions, data collection systems (including a description of the problem gambling, telephone-based outcome data collection system previously referred to), software requirements, and privacy issues. Many of these recommendations remain relevant and should be read in conjunction with those presented in this report. Perhaps the only further point to make at this stage is to reiterate the need for a data collection/management system that facilitates prompt feedback of ADOM-derived data to the respective client and clinician. The ideal scenario would be computerised administration of the ADOM allowing for immediate feedback (e.g. comparison of current ADOM results with prior results or with clinic/sector/population norms) and immediate reporting to a centralised database. Realistically, this scenario is unlikely to eventuate in the short-to-mid term as it would require reliable computer access in the context of a scheduled appointment (i.e. widespread availability of computer hardware across AOD treatment clinicians and services) and a significant shift in standard clinical practice (i.e. incorporating the 'computer' into a therapeutic exchange). The ADOM is

most likely to be pen and paper-based in most AOD treatment settings. Thus, a data collection/management system centred on this mode of administration will be required in the first instance. Key issues to think through will be: who transfers pen and paper data into a computer-based database and at what point, how is the accuracy of data entry monitored, how does client/clinician feedback occur and at what point, and how is uptake to a centralised database facilitated. Given that AOD treatment services have varied access to computer resources and/or administrative support, these issues may need to be addressed at a service, rather than sector, level.

## 5.7. OTHER CONSIDERATIONS

A sound training program, instructive resources, supportive data collection and management systems, and the provision of ongoing support should be central platforms of any attempt to implement the ADOM in the AOD treatment sector. Failure to provide any of these is highly likely to result in limited compliance and subsequently undermine the potential of the ADOM to serve as a potentially beneficial client outcomes monitoring and clinical decision making tool. Training should emphasise the functionality of the ADOM, provide working examples of how the instrument may best be applied in clinical practice, and highlight the intrinsic qualities of the tool, such as its brevity, its multi-dimensional nature, and its inclusiveness. In this way the training program would be both instructive and promotional. The 'guide for keyworkers' developed for users of the Treatment Outcomes Profile (TOP), the UK equivalent of the ADOM, is an excellent example of what an instructive resource could look like (National Treatment Agency for Substance Misuse, 2007). The TOP website is also instructive in this regard ([http://www.nta.nhs.uk/areas/outcomes\\_monitoring/](http://www.nta.nhs.uk/areas/outcomes_monitoring/)), as is the information provided by McLellan and Colleagues (2005) on concurrent recovery monitoring.

The ADOM requests clinical information many AOD treatment services may already be collecting as part of existing screening or assessment procedures. Due to screening/assessment practices varying widely between services, consideration is required in regard to integrating or replacing the ADOM with existing data collection protocols. Furthermore, although the ADOM should in no way replace assessment, always an inherent danger when such instruments are introduced, thought does need to be given as to how the ADOM, if it were to be implemented, could complement, rather than duplicate existing data collection practices, especially in the early stages of client engagement with the service. This issue warrants careful consideration as AOD treatment clients often express frustration at perceived repetitiveness in the data collection/assessment aspects of service admission.<sup>6</sup> Moreover, given the often brief nature of AOD treatment contact for a proportion of clients (detailed earlier), any duplication of data collection in the early stages of treatment contact may undermine the potential therapeutic value of what is already likely to be a minimal intervention opportunity. The task of assimilating the ADOM with existing data collection protocols should occur at the level of the service provider for, as previously noted, screening/assessment practices vary widely between (and sometimes within) services.

Lastly, taking into account the issues raised in regard to implementation, it is possible that routine outcome measurement may be of little clinical benefit to health service clients (Andrews & Page, 2005; Patterson, Matthey, & Baker, 2006) and the reliability of clinician facilitated outcome data is questionable, especially when funding decisions may be made on the basis of that data (Bilsker & Golder, 2002). However, as McClellan et al., (2005) argue addressing the questions in respect to: are clients participating in their treatment; reducing their substance use; improving their health and social functioning and; reducing harm to themselves and the broader community, are fundamental questions for contemporary AOD service providers as they are for other health care service providers. In the present health care environment demonstration of responsive treatment and effective clinical decision making and accountability to clients as well as to funders is critical.

Accordingly, if the ADOM is to be implemented in the AOD treatment sector then soundly evaluating the resulting impact on client outcome and the reliability of the resulting data will be an important step towards

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<sup>6</sup> To further reduce potential frustration with the repetitiveness of the ADOM, clinicians would need to educate clients/significant others about the purpose of routine outcome measurement.

supporting the value of outcome measurement.<sup>7</sup> The success of any future implementation effort should not be (primarily) based on rate of compliance with ADOM administration protocols and the ADOM-derived evidence of positive treatment outcome. Rather, what is needed is an evaluation methodology that allows the clinical benefits at the individual client level of implementing routine outcome measurement, if any, to be identified<sup>8</sup> and that allows a comparison between ADOM-derived outcome data and outcome data obtained from a range of collateral sources such as significant others, urinalysis, medical records.

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<sup>7</sup> The ADOM has proven reliability under the conditions in which it was tested (as described in this report). However, if ADOM-derived data is used to inform health service planning (or is perceived to) then this would introduce a source of bias not present during testing.

<sup>8</sup> Results indicative of positive treatment outcome should not be considered 'evidence' of the benefit of routine outcome monitoring. Rather, what is needed is evidence to suggest that the introduction of routine outcome monitoring has resulted in improved client outcomes (i.e. that routine outcome monitoring contributes to positive clinical outcomes for clients rather than simply measuring positive outcomes that would have occurred in the absence of routine outcome monitoring anyway, or that may have been greater if routine outcome monitoring had not been introduced).

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# APPENDICES

## APPENDIX 1: PROTOTYPE INSTRUMENT (VERSION 1 OF 4) PRESENTED IN ADOPT PART 1

HCU:

All questions relate to "the past four weeks or since you last completed this questionnaire if more recent".

In the last four weeks how many days were you an inpatient or in custody:

  
↓

do not administer questionnaire if answer is 22 days or more

### Part A

1. In the past four weeks, on how many days did you drink alcohol?

Days used (0-28)	
<input type="text"/>	<input type="text"/>

2. In the past four weeks how much did you drink on a typical drinking day?

(1 Standard Drink = 1 can of beer, 100ml wine, or 1 double of spirits, where  
bottle of wine = 7 or jug of beer = 3 or 750ml spirits = 23)

In the past four weeks, on how many days did you use:

	Days used (0-28)	
3. Cannabis?	<input type="text"/>	<input type="text"/>
4. Amphetamines/stimulants? such as P, methamphetamine, speed, or Ritalin?	<input type="text"/>	<input type="text"/>
5. Opioids?	<input type="text"/>	<input type="text"/>
6. Sedatives? such as valium, temazepam, or footballs	<input type="text"/>	<input type="text"/>
7. Any other drugs, such as ecstasy, LSD, solvents, GHB, etc. Please list drugs: <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
(Interviewer: if "other drugs" contains substances covered in the above questions please return to the appropriate question and re-code)		
8. Injected drugs specify which drugs injected: <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>

9. Please tick main drug/s of concern, including alcohol (agreed by worker and consumer) ☐

10. In the past four weeks how many cigarettes have you smoked per day on average (code zero for non-smokers)

Please turn over



## Part B

11. In general, would you say your health is:
- |                 |   |
|-----------------|---|
| Excellent ..... | 0 |
| Very Good.....  | 1 |
| Good .....      | 2 |
| Fair .....      | 3 |
| Poor.....       | 4 |
12. During the last four weeks how much of the time has your physical health or emotional problems interfered with your normal social activities (like visiting friends, relatives etc.)?
- |                            |   |
|----------------------------|---|
| All of the time.....       | 0 |
| Most of the time .....     | 1 |
| Some of the time .....     | 2 |
| A little of the time ..... | 3 |
| None of the time .....     | 4 |
13. During the last four weeks how much of your time was taken up with one or more of the following: paid or voluntary work, study, or care-giving)?
- |                            |   |
|----------------------------|---|
| All of the time.....       | 0 |
| Most of the time .....     | 1 |
| Some of the time .....     | 2 |
| A little of the time ..... | 3 |
| None of the time .....     | 4 |
14. In the past four weeks:
- |  |   |
|--|---|
| I haven't had any thoughts of harming or killing myself.....                       | 0 |
| I have thoughts of harming or killing myself, but I would not carry them out ..... | 1 |
| I have self-harmed .....   | 2 |
| I wanted to kill myself.....   | 3 |
| I have attempted to kill myself.....   | 4 |
15. In the past four weeks:
- |  |   |
|--|---|
| I haven't had any thoughts of physically harming or killing someone .....                      | 0 |
| I have thoughts of physically harming or killing someone, but I would not carry them out ..... | 1 |
| I have physically harmed someone .....   | 2 |
| I have seriously considered killing someone.....   | 3 |
| I have attempted to kill someone.....  | 4 |
16. In the past four weeks have you been arrested or charged with a criminal offence? YES/NO

## APPENDIX 2: AMENDED PROTOTYPE INSTRUMENT (VERSION 2 OF 4)

Draft ADOM measure: Part A

*All questions relate to the past four weeks or since the client last completed this questionnaire if more recent. The questions do not relate to prescription medication*

*In the last four weeks how many days was the client an inpatient or in custody  
(do not administer questionnaire if answer is 22 days or more):*



### Part A

1. In the past four weeks, on how many days did the client drink alcohol?

2. In the past four weeks how much did the client drink on a typical drinking day?

*(1 Standard Drink = 1 can of beer, 100ml wine, or 1 double of spirits, where  
bottle of wine = 7 or jug of beer = 3 or 750ml spirits = 23)*

In the past four weeks, on how many days did the use:

	Days used (0-28)	
3. Cannabis	<input type="text"/>	<input type="text"/>
4. Amphetamine-type stimulants E.g. methamphetamine, speed, or Ritalin	<input type="text"/>	<input type="text"/>
5. Opioids	<input type="text"/>	<input type="text"/>
6. Sedatives/tranquilisers E.g. diazepam (valium) or temazepam	<input type="text"/>	<input type="text"/>
7. Any other drugs. E.g. ecstasy, LSD, solvents, GHB etc Please list drugs: _____ _____	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
<i>(interviewer: if "other drugs" contains substances covered in the above questions please return to the appropriate question and recode)</i>		

8. Please tick main drug/s of concern, including alcohol (agreed by worker and consumer) \_\_\_\_\_

9. Record number of days injected non-prescribed drugs in past four weeks  
(if none, enter zero and go to question 10):

Inject with needle or syringe used by someone else (including partner)?

Yes ☐ No ☐

Inject using a spoon, water or filter used by someone else (including partner)?

Yes ☐ No ☐

10. Record number of cigarettes smoked per day, on average, in past four weeks  
(if non-smoker, enter zero):

## Part B

- All of the following questions would be answered on the following 5-point scale: 0 = never, 1= once or twice, 2 = once or twice a week, 3 = three or four times a week, 4 = daily or almost daily
- The questions have been worded as if the clinician is going to provide the answer based on a discussion with the client.

### Possible Physical/Mental Health Questions:

11. During the past four weeks how much has the client physical health interfered with their day-to-day functioning?
12. During the past four weeks how often has the client psychological or mental health interfered with their day-to-day functioning?
13. During the past four weeks how often has the client not been able to do what is normally expected of them because of a physical or mental health problem?
14. During the past four weeks how often has the client thought about physically harming his or her self (inclusive of suicide ideation)?
15. During the past four weeks how often has the client attempted to physically harm his or her self (inclusive of suicide attempts)?

### Possible Social Functioning Questions:

16. During the past four weeks how often has the client alcohol or drug use led to conflict with friends or family members?
17. During the past four weeks how often has the client alcohol or drug use interfered with their normal social activities?
18. During the past four weeks how often has the client not been able to do what is normally expected of them due to their alcohol or drug use?
19. During the past four weeks how often has the client experienced any problems with work or other regular daily activities as a result of alcohol or drug use?
20. During the past four weeks how often has the client engaged in paid employment?
21. During the past four weeks how often has the client engaged in voluntary work, study, or care giving activities?
22. During the past four weeks how often has the client moved residence or stayed at a different place from the night before?

### Possible Public Risk Questions:

23. During the past four weeks how often has the client been involved in any criminal or illegal activity?
24. During the past four weeks how often has the client driven a motor vehicle (e.g. car, motor cycle, truck) while under the influence of alcohol or drugs?
25. During the past four weeks how often has the client had unsafe sex (e.g. unprotected sex with new partner)?
26. During the past four weeks how often has the client threatened or caused physical harm to someone else?

## APPENDIX 3: COLLATED KEY INFORMANT FEEDBACK

Table 8. Key Informant feedback on the amended prototype instrument (version 2 of 4)

Key Informant Code	Part A Feedback:
	<b>1. Did you find any of the questions unclear, unacceptable or irrelevant? If yes, which one(s), what did you not like, and what changes would you make?</b>
KI 2	I thought the questions were appropriate.
KI 3	I don't know how effective [questions around sharing injecting equipment, see question 9] will be. Most people will not admit sharing, but some do reuse fits regularly which is still higher risk. [Re: question around sharing with partner, see question 9] Most people using opiates do so with others. It is rare to cook separately. Both these questions strike me as assumptive, and not very strengths based or neutral.
KI 4	The questions were fine.
KI 5	The question about cigarettes - Why is this relevant? E.g.: "I came to this service to give up alcohol, not cigarettes" And as for the question about injecting - these could offend those not injecting. Often when people come to an AOD service they fear being lumped in with the worst - this question could perpetrate this. As does the question about being an inpatient or in custody.
KI 6	I was wondering if the "Opioids" question included methadone and this is where things get tricky: I'm assuming the use of the term therefore includes street methadone but what about the person completing the tool who might be prescribed methadone, they might be using it IV so it would be helpful to know whether the interventions are 'helping' re: frequency of injecting and/or reducing harms.
KI 7	Question 10 - "how many cigarettes..." rather than "record number..." Question 5 - how does methadone (or other substitution therapy) fit?
KI 9	Questions clear, relevant and made acceptable with counsellor's support to walk client through format.
KI 10	Questions are basic however very relevant.
KI 11	I note that reference is made to Ritalin. If a trade name is used in the questionnaire it will be important to position other trade names along side it. Rubifen is now the more common preparation of methylphenidate. With regard to definition of standard drinks, I think if this is included it would be useful to add premixed drinks. These seemed to be commonly consumed by our clientele and some of them are relatively potent (8% alcohol) with a can equating to 2 or more standard drinks. Question 9 could be a little ambiguous. Where we say inject with needle or syringe, I wonder whether it could say inject with <i>same</i> needle or syringe. Similarly for the point below it regarding spoon, water, or filter.
KI 12	Item 2. Might pay to note "typical" (not average) drinking day. Item 8. "Drugs of concern"? Do you mean "for treatment" or "requesting help"
	<b>2. Are there any further questions that you think we should include, or should we be asking about anything else?</b>

<b>KI 1</b>	Will be useful for users to elaborate on Route of Administration for the Drug Section adding to the amount/frequency columns re efficiency of harm minimisation strategies if possible??
<b>KI 2</b>	Quantity of other substances does not appear to be clearly asked and given it is an outcome tool possibly not indicated however as a serial tool it would be good to see amounts decline or rise. Traditionally with opioids the question has been in the last five days.....
<b>KI 4</b>	<p>RE IV use. Something to consider is the risk of bacterial infection from IV methamphetamine use e.g. endocarditis. Most people just dissolve meth in cold water before injecting and bacteria from drug can be a big risk especially given immune systems of meth users are generally not functioning well. Even sterile water will not remove bacteria. Asking if people use a 0.2 micron wheel filter would tell you if they are removing bacteria.</p> <p>Also re IV use. It could pay to ask if people have injected methadone that was not prescribed to them. Given methadone is a liquid anyone purchasing illicit methadone may be injecting viruses if the person they purchased it off previously stuck a used needle into the same liquid.</p> <p>Also very important there is no question about the quantity of drug use, or even how much street value / price of drugs used are.</p>
<b>KI 6</b>	Safe use of prescribed meds.
<b>KI 7</b>	<p>Do you need to include a question on gambling?</p> <p>?ask about party pills (although they may be recorded under amphetamine like substances)</p>
<b>KI 9</b>	No.
<b>KI 10</b>	If the intent is to track a persons drinking and using habits they are adequate.
<b>KI 11</b>	I do wonder...why you have chosen to exclude prescription medication. The survey examines opioid/benzodiazepine/psychostimulant use and. On occasion, clients may be misusing (including injecting) medication prescribed in their own name.
	<b>3. What do you think about the way it is laid out? How might you change it?</b>
<b>KI 1</b>	Will you add scoring columns to the Drug Section?
<b>KI 2</b>	Web layout is always a bit different though looks ok. Colour is good to highlight headings
<b>KI 4</b>	All good.
<b>KI 6</b>	Good, easy to use and easy to read.
<b>KI 7</b>	Include in the draft room for demographics e.g. personal details, NHI etc.
<b>KI 9</b>	Basic layout, as are the current AOD screens we use. Could make more interesting with a different typeface.
<b>KI 10</b>	Layout is fine.
<b>KI 11</b>	I think it would be nice to see the tobacco question positioned alongside other substances. That is to say make it item number 8 as opposed to item 10. This would help position tobacco as a significant substance, rather than an add on at the end.
	<b>4. Are there any other comments you would like to make?</b>
<b>KI 9</b>	Beneficial to include safety questions re injecting.
<b>KI 10</b>	Do clients receive a copy of the questionnaire or sign it as a true and accurate record of their alcohol and drug use?
<b>KI 12</b>	Needs to be kept as SHORT as possible if this as well as HoNOS not instead of it.

Key Informant Code	Part B Feedback:
	<b>1. Did you find any of the questions unclear, unacceptable or irrelevant? If yes, which one(s), what did you not like, and what changes would you make?</b>
KI 2	21 is of interest in particular care giving....study and voluntary work though questionable relevance given there measures. Could 14 and 15 be integrated or is 15 enough.
KI 3	I feel the tone of these questions is set for information/stats gathering ease rather than as a combined therapeutic tool. If it is to be used <i>with</i> clients in a therapeutic setting it needs to be framed in a much more balanced way. Thinking about how different clinicians work, I can see the potential for some clinicians to use this in a prescriptive way verbalising the way the question is written. With this in mind, how the questions are framed becomes very important.
KI 4	All good.
KI 6	Q13 seemed like a repetition of Q11 - same thing but in different words.[Q]27. During the past four weeks how often has the client's alcohol or drug use interfered with their <i>normal social activities</i> ? For an AOD user (and yes I am speaking from experience here) their 'normal social activities' might be going to the pub: that's the reality. A lot of us don't engage in what straight people would call 'normal' social activities. I doubt the value of this question so suggest removing it. The next two [questions 28 and 29] are more specific and therefore easier to answer.Q20 could be deemed undervaluing by and of some people. Paid employment is only one type of employment and ought not to be valued above unpaid voluntary work or caring for children.
KI 7	Could combine questions 20 & 21, 14 & 15, and 23 & 24
KI 8	The presentation of the questions is too clinical. Hopefully the questions in part (A) will determine whether the person has a alcohol/drug problem, giving the staff member the opportunity to be more consumer friendly with the questions in social functioning questions.
KI 9	Not myself however some clients may refuse to answer a question like No 23.
KI 10	How many people will answer 23? Is it relevant? In fact questions 23-26 around public risk are unacceptable. Clients of AOD services are there for AOD treatment not to answer invasive questions about their behaviour.
KI 11	I note that the questions have been worded as if the clinician is going to provide the answer based on a discussion with the client. This may allow for a fair bit of clinician bias in the way that the questions are answered. For example, a patient with fatigue and lethargy, perhaps consequent on hepatitis C may or may not be judged as physically unfit for work. I would prefer it if the clients assigned their own score.
KI 12	11, the question is "how much" the answer is "how often" 13. It concerns me if we normalize "mental health" as a reason for people not to do things. If we want to know about failure to act in order to avoid one's experience we should ask about that.
	<b>2. Did you consider the 5-point response format to be acceptable? If not, why not and what changes would you recommend?</b>
KI 2	Familiar and acceptable.
KI 4	All good.
KI 5	It seems kind of insulting - like how can you put a measure on something like suicide ideation. What if for this they score a one rather than a four, what then would be

	done with this info, surely if someone has thought about it once a week, is as alarming as every day. Likewise with domestic violence.
KI 6	Yes, acceptable. I found it easier to think about and answer in terms of "once or twice", "once a week" and would imagine that is how people would respond but still (of course) worthwhile having numerical value attached - I just don't think respondents will respond in numbers.
KI 7	Yes and set it out in tick box format.
KI 9	Some of our clients would be frustrated with the 5-pt response format. I appreciate use of the format gives precise feedback and can be scaled.
KI 10	Good.
KI 11	If we are to use the five point scale I would alter the wording of scores 1&2 as they look very similar but actually are vastly different. Perhaps a score of 1 could be defined as "very infrequent use of the substance" as opposed to "once or twice", which is the same expression used in score 2. I do wonder whether likert scales would work better for many of the questions, especially those around physical health.
	<b>3. Are there any further questions that you think we should include, or should we be asking about anything else?</b>
KI 1	Will it be useful to ask questions such as..How their use within the 28 day period has impacted on their Cultural and Spiritual beings..since we're such a diverse community??
KI 2	During the past four weeks how often has the client thought about ceasing substance use
KI 3	How about including questions around how often the strategies learnt from CADS/intervention have changed outcome for client. With family, work, health etc. When applied. How they manage - skills they bring to the service. How they managed - skills they are learning/have learned vs. outcome
KI 4	Seems fine.
KI 5	Indeed! What about a strengths based approach? How about what they are doing well?
KI 6	After the last question, suggest adding:30. During the past four weeks how often has the client been threatened or physically harmed by someone else?
KI 7	?include a question on motivation how strong is the clients support networks (family, friends etc)
KI 8	How would you like us staff to help you with your treatment?' As a past consumer, this is a big one for me. Has your client done any AOD treatment before? (what was that treatment) Did you manage a period of abstinence that treatment? If alcohol isn't your main addiction and you drink more than the 14/21 standard drinks per week. Do you feel OK about your drinking?
KI 9	I'm not aware of the context this questionnaire will be utilized in! CADS, etc? Are they likely to replace audit, leads, sds?
KI 10	NIL
	<b>4. What do you think would be the best number of questions to include in Part B and if you were going to remove any questions, which ones would you remove?</b>
KI 2	See 1.
KI 3	Do #'s 20 and 21 need to be separated?
KI 4	Not sure.
KI 6	Optimally no more than 5 questions per section. Remove 13, 17, 20

<b>KI 9</b>	They're all relevant, some more so for certain groups e.g. No 22.
<b>KI 12</b>	"collapse" items 20&21 - make it about regular productive activity outside home maybe.
	<b>5. Are there any other comments you would like to make?</b>
<b>KI 1</b>	I think it will be a very useful and user-friendly tool to have.
<b>KI 3</b>	I think it would be very confronting for a client to be asked all those questions at one time without offering any support. I would feel quite devastated and distressed leaving and appointment where this is the content. All the questions are negatively based. Where are the strengths? "What strategies do you use to stake ok?". Where is the positive reinforcement? The way the questions are framed seems predetermining and judgemental / stereotyping. It doesn't feel at all neutral. I understand the need to capture this information but I think you need to think more about the WAY you use to capture it. All interactions have an impact on both the client and the client's ongoing relationship with services and whether or not the client wants to or will return.
<b>KI 4</b>	Q23 may need to be clarified as to if the use of illegal drugs constitutes criminal behaviour, or supply maybe.
<b>KI 9</b>	Training will be required for effective use of this tool.
<b>KI 10</b>	Thank you for involving a professional Consumer Advisor like myself in this process. I hope my 10 years of working in consumer related roles in both mental health and AOD has been of some assistance. Too often we are not involved in this kind of feedback process at all or far too late to consult with our consumers involved in our network.
<b>KI 11</b>	I think that this questionnaire is fairly time intensive. Why not simply use the SF 36 or other validated health questionnaires here. I think the overall theme of the questions is good, but clearly the way in which the question is asked becomes very important in the outcome measure.
<b>KI 12</b>	This will take quite a bit of time - if it is to be mandatory and regularly repeated there will be lots of missing data and probably inaccurate data.



## APPENDIX 4: REVISED INSTRUMENT (VERSION 3 OF 4) SENT TO AOD CLIENTS AND CLINICIANS FOR FEEDBACK

### Draft ADOM measure: Part A

All questions relate to the past four weeks

The questions do not apply to prescribed medication; however, any misuse of prescription medication should be included e.g. taking more than prescribed/injecting of medications not intended to be injected

In the last four weeks how many days have you been an inpatient or in custody  
(do not complete the questionnaire if answer is 22 days or more)



1. In the past four weeks, on how many days did you drink alcohol?
2. In the past four weeks how many standard drinks did you consume on a typical drinking day?

(1 Standard Drink = 1 can of beer, 100ml wine, or 1 double of spirits, where  
bottle of wine = 7 or jug of beer = 3 or 750ml spirits = 23)

Days used (0-28)
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In the past four weeks, on how many days did you use:

	Days used (0-28)	
3. Cannabis		
4. Amphetamine-type stimulants E.g. methamphetamine, speed, methylphenidate (Rubifen)		
5. Opioids		
6. Sedatives/tranquilisers E.g. diazepam (Valium), temazepam		
7. Any other drugs. E.g. ecstasy, hallucinogens, solvents, GHB etc Specify what drugs: _____  (Interviewer: if "other drugs" contains substances covered in the above questions please return to the appropriate question and recode)	_____ _____ _____	— — —

8. Please tick the main drug/s of concern, including alcohol, as agreed by you and your clinician \_\_\_\_\_↑

9. How many cigarettes have you smoked per day, on average, in the past four weeks? (if non-smoker, enter zero):			
10. How many days have you injected drugs in the past four weeks? (if none, enter zero and go to question 12):			
11. Have you shared injecting equipment at any time in the past four weeks? (sharing means using someone else's equipment which has already been used or someone using yours regardless of whether you were both present at the time or not; equipment includes needles, syringes, water, dregs, tourniquets, spoons, filters)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Yes</td><td style="width: 50%; text-align: center;">No</td></tr> </table>	Yes	No
Yes	No		

Please turn over

**Draft ADOM Measure: Part B**

*Please read each question carefully and then place a tick in the box under the most appropriate response option*

12. During the past four weeks how often has your physical health interfered with your day-to-day functioning?

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

13. During the past four weeks how often has your psychological or mental health interfered with your day-to-day functioning?

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

14. During the past four weeks how often have you attempted to physically harm yourself (including suicide attempts)?

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

15. During the past four weeks how often has your alcohol or drug use led to conflict with friends or family members?

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

16. During the past four weeks how often has your alcohol or drug use interfered with a social, recreational or personal activity of importance to you or others?

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

17. During the past four weeks how often have you experienced any problems with work or other regular daily activities as a result of alcohol or drug use?

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

18. During the past four weeks how often have you engaged in paid employment, voluntary work, study, or care giving activities?

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

19. During the past four weeks how often have you moved residence or stayed at a different place from the night before?

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

20. During the past four weeks how often have you been involved in any criminal or illegal activity other than the possible use of an illicit substance (includes driving a motor vehicle under the influence of alcohol or drugs or supplying an illicit substance to another person)?

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

21. During the past four weeks how often have you had unsafe sex (e.g. unprotected sex with a new partner or with an old partner who has had unprotected sex with others)?

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

22. During the past four weeks how often have you threatened or caused physical harm to someone else?

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

## APPENDIX 5: PARTICIPANT INFORMATION SHEET AND CONSENT FORM FOR AOD CLIENTS PARTICIPATING IN PILOT STAGE OF TOOL DEVELOPMENT

### Alcohol and Other Drug Treatment Outcomes - ADOM

#### Pilot Stage - Developing the tool

#### ~PARTICIPANT INFORMATION SHEET~

**Can you help?** – Our research team has developed a tool that we hope will help measure clinical outcomes for people who are having problems with alcohol or other drug use. This tool was designed following extensive consultation with the treatment sector, including consumers (through the ADOPT I Project). When the tool is finished it will help to monitor the progress of those in substance use treatment. You are invited to take part in a study to help us test the tool.

**What do you have to do?** - All you have to do for the study is complete the new questionnaire that we are designing and provide feedback on it. It will take about 15-30 minutes of your time.

**Will anyone know you are involved?** - The study is **confidential**. This means that when the results of the study come out no one will know that you were involved.

**Do you have to be involved?** - The study is **voluntary**. This means that you do not have to complete the questionnaire with the clinician/researcher if you do not want to. Whether or not you choose to take part will not affect the treatment that you receive from your clinician.

**What are the benefits?** – When enough questionnaires have been completed the results will be analysed. These results will be used to help a range of people who have alcohol and drug use problems. The questionnaire may also make you think a bit more about your own substance use and form a useful part of your treatment. If you would like to know what we find then you can indicate this on the consent form or contact us at the address below and we will send you a summary of the findings, or advise you of the website where you can get a copy of the final report.

**Are there any risks?** - If you find the questionnaire too hard or upsetting, you are allowed to stop. Your clinician can talk about any strong feelings you might have at the time you are completing it. In the case of the researcher, they will check with you whether you need to contact someone for additional support. Below we have listed alternative places you can access help if you are unable to do this through your clinician. You can also contact the research team on the contact numbers below.

**ACC Cover** - In the unlikely event of a physical injury as a result of your participation in this study, you may be covered 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 expenditure and there may be no lump sum compensation payable. There is no cover for mental injury unless it is the 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.

**What are your rights?** – If you have any queries or concerns regarding your rights as a participant in this study, you may wish to contact a Health & Disability Advocate, telephone 0800 423 638. In the unlikely event of a physical injury as a result of your participation in this study, you will be covered by the accident compensation legislation within its limitations.

#### **Thanks for considering this proposal.**

This study has received ethical approval from the National Ethics Committee.

Principal Investigator - Dr Gail Robinson, 50 Carrington Rd, Pt Chevalier, Auckland. Ph 09-8155830, Fax 09-8155847. Gail.robinson@waitematadhb.govt.nz

## Routine Outcome Measurement Questionnaire - ADOM

### Pilot Test

Principle Investigators: Daryle Deering, Gail Robinson

~CONSENT FORM~

Please tick the relevant boxes

- |  |                              |                                |
|--|------------------------------|--------------------------------|
| ➤ I wish to have an interpreter  | Yes <input type="checkbox"/> | No <input type="checkbox"/>    |
| ➤ E hiahia ana ahau ki tetahi KaiwhakaMāori/kaiwhaka pakeha korero   | Ae <input type="checkbox"/>  | Kao <input type="checkbox"/>   |
| ➤ Ou te mana'o ia I ai se fa'amatala upu   | Ioe <input type="checkbox"/> | Leai <input type="checkbox"/>  |
| ➤ Oku ou fiema'u ha fakatonulea  | Io <input type="checkbox"/>  | Ikai <input type="checkbox"/>  |
| ➤ Ka inangaro au I tetai tangata uri reo   | Ae <input type="checkbox"/>  | Kare <input type="checkbox"/>  |
| ➤ Fia manako au ke fakaaoga e taha tagata fakahokohoko kupu  | E <input type="checkbox"/>   | Nakai <input type="checkbox"/> |
|  |                              |                                |
| ➤ I understand that taking part in the study is entirely my own choice.  | Yes <input type="checkbox"/> | No <input type="checkbox"/>    |
|  |                              |                                |
| ➤ I understand that my participation in this study is entirely confidential.<br>There will be nothing in any reports on the study that will identify me. | Yes <input type="checkbox"/> | No <input type="checkbox"/>    |
|  |                              |                                |
| ➤ I consent to take part in the study.   | Yes <input type="checkbox"/> | No <input type="checkbox"/>    |

Name of participant .....

Signature .....

Date .....

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

.....  
.....  
.....

## APPENDIX 6: QUESTIONNAIRES SEEKING FEEDBACK FROM CLINICIANS AND CLIENTS AT PILOT STAGE OF TOOL DEVELOPMENT

### CLINICIAN/ALCOHOL AND DRUG WORKER FEEDBACK QUESTIONNAIRE

#### Piloting the Draft

#### Alcohol and Other Drug Outcome Tool - ADOM

Dear Colleague

Thank you very much for trialling the draft brief outcome measure and providing feedback. It is essential to have feedback from alcohol and drug treatment workers based on 'real-life experience'. Your specific comments are particularly welcome. Please use the back of the questionnaire if needed. If you have queries/points of discussion please feel free to email Justin Pulford (Justin.pulford@waitematadhb.govt.nz) or ring the Clinical Research & Resource Centre (CRRRC) on (09) 837 8883.

#### Question 1.

- i) What is your position title? \_\_\_\_\_
- ii) What is your professional group? \_\_\_\_\_
- iii) What is your gender? \_\_\_\_\_
- iv) What is your ethnicity? \_\_\_\_\_
- v) How long (years and months) have you been working in the alcohol and drug field? \_\_\_\_\_

#### Question 2.

- i) How many clients did you trial the tool with? .....
- ii) What was their primary substance use problem (second and third if applicable)  
Client 1 .....  
Client 2 .....  
Client 3 .....  
Client 4 .....  
Client 5 .....
- iii) How many of the clients were: (a) male ..... (b) female .....
- iv) How many of the clients were: (a) NZ European/Pakeha .....  
(b) Māori.....  
(c) Pacific Island.....  
(d) Asian.....  
(e) Other (please specify) .....
- v) How many were in each of the following age groups: (a) 18-25 .....  
(b) 25-35 .....  
(c) 35-45 .....  
(d) 45 – 55.....  
(e) 55-65.....  
(f) over 65 years.....

### CLINICIAN/ALCOHOL AND DRUG WORKER FEEDBACK QUESTIONNAIRE

**NB: The total number of questions in Part B will be reduced in the final tool. Please bear this in mind when answering the following questions:**

**Question 3.**

How *comfortable* did you feel administering the draft outcome tool?

1	2	3	4	5	6	7
Very uncomfortable			midway	very comfortable		

**Comments:**

**Question 4.**

How much of a *hassle* did you find administering the draft outcome tool?

1	2	3	4	5	6	7
no hassle			midway	a lot of hassle		

**Comments:**

**Question 5.**

How *accurately* do you think the Part A responses will reflect your client's substance use over the past four weeks ?

1	2	3	4	5	6	7
not at all			midway	very accurate		

**Comments:**

**Question 6:**

How *feasible* do you think administering the tool with clients as an outcome measure would be on an ongoing basis?

1	2	3	4	5	6	7
not at all			midway	very accurate		

**Comments:**

**CLINICIAN/ALCOHOL AND DRUG WORKER FEEDBACK QUESTIONNAIRE**

**Question 7:**

Refer only to Part B. Which were the five most useful questions?

Again, refer only to Part B. Which were the five least useful questions?

**Question 8:**

What other questions would you include in Part B?

**Question 9:**

Any there any other amendments that you think should be made?.....Yes / No (please specify)

**Comments**

**Question 10.**

In your view, taking into account potential amendments, would the draft tool be an acceptable and useful brief outcome/review tool for use with clients (i.e. to support current or future processes of review of treatment progress in relation to alcohol and drug use)? Please add any other relevant comments.

**Comments:**

**Thank you once again for completing this questionnaire.**



ALCOHOL AND DRUG CLIENT FEEDBACK QUESTIONNAIRE

# **The Alcohol and Other Drug Treatment Outcome Tool: ADOM**

## **Participant feedback**

We would be grateful if you could provide us with some general information about you. Please note that we do not want you to write your name anywhere so your answers will remain private and confidential.

Date:.....

Age:.....

Ethnicity.....

Gender.....

## **The draft ADOM tool**

Over the page are Parts A and B of the draft ADOM tool. This tool has been designed to help monitor the progress of those in substance use treatment.

Please complete the draft ADOM tool and then answer the subsequent questions. Changes to the draft ADOM will be made based on the feedback provided.

**Thank you very much for completing the brief outcome tool. With your help we hope to be able to provide better treatment for people with substance use problems in the future.**

**ALCOHOL AND DRUG CLIENT FEEDBACK QUESTIONNAIRE**  
**Comment on the draft ADOM tool**

Now that you have completed the draft ADOM tool, it would be great if you could give us some feedback on how you found it. Feel free to answer any (or all) of the following questions and/or to provide additional comment as you see fit.

1) What did you think of the instructions telling you how to use the draft ADOM tool? Please tell us about anything you would change to make these easier to follow.

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2) Did you find any of the questions offensive or upsetting? If yes, which ones and why?

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3) What did you think of the design and layout of the Draft ADOM tool? Was there anything you really liked about it? What would you change?

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## ALCOHOL AND DRUG CLIENT FEEDBACK QUESTIONNAIRE

4) In your opinion, what were the five most relevant questions listed in Part B of the draft ADOM tool (Q's 12-to-22)?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5) In your opinion, are there any other questions that we should have included in Part B of the draft ADOM tool?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6) If you have any other comments that you would like to make please put them here.

[illegible]

THANK YOU AGAIN FOR ALL YOUR HELP

## APPENDIX 7: COLLATED FEEDBACK FROM CLIENTS AND CLINICIANS PARTICIPATING IN PILOT STAGE OF TOOL DEVELOPMENT

**Table 9: Demographic information regarding AOD clients participating in pilot stage of tool development**

CLIENT DEMOGRAPHIC INFORMATION	N = 22
Age	Mean 37.48, Range 23 – 60
Male	13
Female	9
Māori/Cook Island	7
European	10
Pacific Island	4
Asian	1

**Table 10: AOD client feedback on revised instrument (version 3 of 4)**

Client Code	What did you think of the instructions telling you how to use the Draft ADOM tool? Please tell us about anything you would change to make these easier to follow
1	Easy to follow. Should be more in depth. Felt too politically correct.
2	Q8 might be difficult for some people to follow. Would be an improvement to make choices to tick (i.e. 0-4 <input type="checkbox"/> 5-9 <input type="checkbox"/> 10-14 <input type="checkbox"/> 15-20 <input type="checkbox"/> )
3	Clarity on some Qs: 12) During the past four weeks how often has your physical health <i>related to drinking alcohol or drug taking</i> interfered with your day-to-day functioning? 13) During the past four weeks how often has your psychological or mental health <i>related to drinking alcohol or drug taking</i> interfered with your day-to-day functioning? Also, I believe <u>1 single</u> of spirits is a standard drink.
4	Don't understand question. What instructions on "how to use"?
5	Easy to understand the instructions.
6	Easy to follow instructions.
7	Not hard to follow.
8	It was clear and accurate enough to understand the situation of substance use & progress.
9	I found some questions confusing - difficult to follow with the wording.
10	easy to follow
11	no.
12	I think draft ADOM tool is well set out and covers all things to do with addiction.
13	Ok. Easy to follow.
14	Found it straightforward. Was easy to follow.
15	Easy to understand
16	Very straightforward
17	OK
18	Yes
19	It was very easy as being in jail has saved my life. Had I been out of jail the answers would

	have been very different. Probably would have been a bit harder.
20	Easy
21	Found it fairly easy
22	I guess questions asked of me will give those concerned a picture of drug use in a bigger picture. Of course more knowledge the correct people get the better.
<b>Client Code</b>	<b>Did you find any of the questions offensive or upsetting? If yes, which ones and why?</b>
1	No. Questions should be harder to ensure responses are not given under any falsehood and enable a better psyche of the client.
3	No.
4	No.
5	No.
6	No.
7	The first question I found hard - answer.
8	Yes, I found question 22 uncomfortable since the incident was to do with myself being threatened by a steel bar (former boarder) when asked to leave my property so I asked for a cell phone to ring police causing her retaliation & police were called causing arrest on both of us. (I bridged bail for not changing address).
9	Yes, the sex question. What business is it of yours?
10	No
11	no.
12	Not really I thought it was well set out and very straight forward (as in questions were very straight up & honest)
13	why question about sex? Felt ok to answer but questioned why it was asked.
14	No.
15	Yes. Part A, Q8. All drugs are a problem for me and this question may lead me to believe that some drugs are not. This is dangerous ground.
16	No
17	No
18	No
19	not at all as all my answers were never.
20	No
21	No
22	No
<b>Client Code</b>	<b>What did you think of the design and layout of the Draft ADOM tool? Was there anything you really liked about it? What would you change?</b>
1	Hard to remember 28 days - 14 days might make it more accurate & beneficial.
2	It is good
4	Found Q8 confusing, especially layout of said Q.
5	Good design.
6	Easy to understand and follow.
7	I found it easy.
8	Yes, the layout was explanatory and understandable in my substance intake levels. The changes will be based on why there aren't any questions relevant to cultural issues as that would be more appropriate for ethnic groups.
9	It was ok, quite easy to do. Just the first page was confusing.
11	no.

12	I think personally it was well set out & I personally wouldn't change anything.
13	Client felt there should be somewhere to explain his answer.
14	It was easy to follow.
15	Design is good. Need more columns for kinds of drugs e.g. cocaine, ketamine, nitrous oxide, ether.
16	All O.K.
17	It's OK
18	Easy to understand.
19	It's good now it's multi answer instead of having 2 write like these questions on this page, that cud put people off. It did me at first.
20	Easy to understand, not complicated, nothing to change.
21	No
22	Simple enough for anyone to fill out so use friendly.
<b>Client Code</b>	<b>In your opinion, what were the five most relevant questions listed in Part B of the draft ADOM tool (Q's 12-to-22)?</b>
1	13, 14, 16, 18, 22
2	12, 13, 15, 16, 17
3	Please clarify this question - relevant to what? To my drinking pattern, most relevant are: 12, 13, 15, 17, 16
5	12, 15, 17, 20, 21
6	15, 16, 17, 20, 22
7	Nil.
8	13, 14, 17, 19, 20
9	13, 14, 15, 16, 17, 18
10	13, 15
11	none
12	20, 13, 21, 22, 18
13	13, 16
14	12, 15, 16, 17, 20
15	12, 13 (most relevant), 14, 20, 22
16	12, 13, 15, 16, 17
17	12, 13, 14, 18, 20
18	16, 12, 15, 14, 20
19	that these things are available, n feel proud that I answered never.
20	12, 13, 14, 15, 16
21	No most questions okay to answer. Shows I am doing okay.
22	all relevant.
<b>Client Code</b>	<b>In your opinion, are there any other questions that we should have included in Part B of the draft ADOM tool?</b>
1	"How do you feel when you have achieved a goal from your sessions?"
2	"How many times have you thought about drink?"
3	There is no question re: blackouts, memory loss or sickness on day/night of drinking.
5	1) In the last 4 weeks how often have you craved for drinking/drugs? 2) In the last 4 weeks how often have you found yourself unable to stop drinking/drugging once you have started?
6	Outside influences.

7	Nil.
8	Questions on cultural awareness e.g. A white person counselling a Pacific Islander on these issues. Questions on 24 hour helpline would be an advantage as there are issues that could be discussed after hours & weekends.
9	Not sure
10	No
11	none
12	personally I think it covers most things
13	My living situation' (client has long standing issues with housing)
14	No
15	How often do your emotions seem too much to handle How often don't you sleep (i.e. how many days awake) How often do you think of suicide How often do you think of harm someone else How often do you fear other people harming you How often do you drink to get drunk How often do you drink or use alone How often can you say no to a drink or drug How often do you eat meals How many friends do you have that don't drink or use drugs
16	No
18	There is no question about children. We need more support with our children. Highlighting difficulties about our children.
19	No not that I'm aware of.
20	Are other people around you being harmed by yours or others use of AOD? Effects oneself & children
21	No.
22	No
<b>Client Code</b>	<b>If you have any other comments that you would like to make please put them here.</b>
1	This ADOM feels very bland & PC and you can easily switch off & could possibly tick just for the sake of it.
5	Good design, easy to follow. More detailed questions would be good, e.g. suggested above.
7	No.
8	I found the question very uplifting as the outcome looked like there's been some progress in my substance/alcoholic use. Not affecting my life in the negative. Counselling has opened my eyes on the negative effects alcohol can cause in my life. Thank- you.
9	No.
11	no.
12	I'm personally think this study covers most things of importance. Questions were all straight forward and this study deals with all aspects of addiction.
13	As above.
15	Lots of difficulty with memory. Calculating drink very difficult after a point too drunk to remember. For me, Part A Q8 is irrelevant as all drugs are a problem.
18	Shame and shyness is a difficulty for Māori people. Support is essential for explaining the document and writing. A lot of people are not confident and need support. Another issue would be confidentiality - CADS have involvement with other agents.
19	I'm on the methadone, I don't think it should be available while in prison, but is not jail its health camp, but in saying that u have 2 be dead 2 get any outside medical care e.g. Dentist. I'm withdrawing off the methadone voluntarily at 1ml every 2 weeks which is not enough. I'm coming off coz something good has to come out of this misery 4 me being Drug free.
21	No.

**Table 11: Demographic information regarding clinicians participating in pilot stage of tool development**

CLINICIAN DEMOGRAPHIC INFORMATION		N = 13
Gender	Female	10
	Male	3
Ethnicity	European	4
	Māori	3
	Pacific Island	4
	Asian	2
Experience	<1 year	2
	1 – 5 years	6
	6 + years	5

**Table 12: Primary substance(s) of concern to clients interviewed by clinicians participating in pilot stage of tool development**

PRIMARY SUBSTANCE(S) OF CONCERN TO CLIENTS	N=17 <sup>9</sup>
Opioids	5
Benzodiazepine	2
Alcohol	8
'P' or amphetamines	2
Cannabis	2

**Table 13: AOD clinician feedback on revised instrument (version 3 of 4)**

QUESTION		MEAN SCORE BASED ON A SEVEN POINT SCALE, FROM LEAST TO MOST
How <i>comfortable</i> did you feel administering the draft outcome tool?		4.92
Clinician Number	Comments	
2	Straight forward questions	
4	Tool was too long.	
5	As it took time away from the counselling service	
9	This was not much different from what I currently do for screening	
10	Questions asked seemed fairly straightforward to ask	
11	This had a lot to do with the level of relationship that had been built with the client. Though it was easy to go through the tool with the client, Q13 Q21 was a little awkward to ask, especially as the client was male (Q21).	

<sup>9</sup> Data was not collected from all clients participating in the pilot stage of the tool's development.



QUESTION		MEAN SCORE BASED ON A SEVEN POINT SCALE, FROM LEAST TO MOST
How much of a <i>hassle</i> did you find administering the draft outcome tool?		2.46
Clinician Code	Comments	
2	Rather long at first, I'm sure it will get faster.	
3	My client was pushed for time as he had someone waiting.	
4	Length of time.	
6	Time being the problem	
8	Client was very understanding and was willing to participate; quite intelligent too.	
9	Not much of a hassle, my concerns were if it became an issue for my client.	
10	In terms of availability this client seemed very open to the process and the questions were not a hassle to deliver.	
11	Unfortunately the clients that I had in mind (initially) never turned up to our appointments so I had to wait a little longer to build rapport with a new client before I could ask them if they can go through the tool with me.	
13	Needed extra time to administer - not possible in a busy clinic. Rate at attendance for one on one other appointments very poor for the mothers on my caseload. Would have been very difficult to get someone in to do this.	
QUESTION		MEAN SCORE BASED ON A SEVEN POINT SCALE, FROM LEAST TO MOST
How <i>accurately</i> do you think the Part A responses will reflect your client's substance use over the past four weeks?		5.31
Clinician Code	Comments	
2	There wasn't space to identify client just established and using ++ - not at full dose of methadone. However the questions did prompt more answers that weren't mentioned prior.	
3	as accurate as he can be	
8	Have had 4 sessions with him before and established good rapport and trust. Showed consistency in what he reported in his use.	
9	He under reports until he has relaxed and then discloses reluctantly his use.	
10	Based on the relationship I had with this client, I believe the answers reflect well the clients substance use over past four weeks.	
12	Clients appeared confident about confidentiality and lack of punitive action if they answered honestly.	
13	This client has always been up front about any substance abuse. Would vary between clients.	

QUESTION		MEAN SCORE BASED ON A SEVEN POINT SCALE, FROM LEAST TO MOST
How <i>feasible</i> do you think administering the tool with clients as an outcome measure would be on an ongoing basis?		4.08
Clinician Code	Comments	
2	Depends, the last 4 weeks might be at a particular 'bad patch' and not a reflection of work done through the year?	
3	Not always open to discuss other drug use.	
4	At the beginning and after 4 sessions to monitor change.	
5	It's an extremely lengthy questionnaire	
10	Ethnic affiliation and perception towards self & others needs to be measured to establish relevance in substance use patterns, esp. in a cultural designed service.	
12	Dependent on situation and relationship with requesting institution.	
13	Dynamics as listed above (see Q4). Although if could be done over the phone would be more achievable.	
Clinician Code	Which were the five most useful questions?	
1	15,16,17,18,20,22	
2	13,19,15,17,20	
3	My client didn't find any of the questions useful.	
4	13, 15, 16, 21	
5	12, 13, 14, 20, 22	
6	12, 13, 14, 15, 17	
7	12, 13, 15, 17, 21	
8	15, 17, 20 21, 22	
10	"Past 4 weeks use & frequency Personal encounters that would not necessarily happen if sober, i.e. unsafe/unplanned sex or fights/arguments."	
12	12, 15, 16, 17, 14	
13	Clients indicated: health, family, forensic info, drug use, risk.	
Clinician Code	Which were the five least useful questions?	
1	21,14,13,12,19	
2	21,18,14,12	
3	sexual health - my client did not feel it was a helpful question - too intrusive - more relevant for the sexual health clinic.	
4	17, 19, 20, 22	
5	19, 18	
6	21, 19, 18	
7	18, 19, 20, 22, 17	

8	12, 13, 14, 18, 19
10	Can't remember questions
12	18, 19
13	They all appear relevant
<b>Clinician Code</b>	<b>What other questions would you include in Part B?</b>
3	More around supports, coping strategies.
4	Functions Q
10	How relevant do they see their own ethnic/cultural affiliation? How does client see other nationalities they either associate with or Europeans which group if any have influenced their perception mostly?
13	Clients brought up about - Maori issues; children. I wondered if HCV and GP contact might be useful given in latest survey 50% of GPs identified ignorance around treatments and follow up. Good point of discussion for client and case manager.
<b>Clinician Code</b>	<b>Any there any other amendments that you think should be made?</b>
2	No
4	More compact less length.
5	Yes. I think the questionnaire should be shortened and the arrow would be removed as it confused one of the clients.
7	No
8	No
10	Yes. Questions around how important the client views beliefs from their own culture (and or ethnic group, depending on heritage or degree of affiliation) and that of general AOD treatment intervention strategies.
12	No.
13	The only one comment would be about the exclusion of prison clients on methadone. Given that treatment is now maintained and there is a requirement that they also be included (CDHS) in HoNOS - ignoring this group could be problematic. Also many clients continue to access drugs freely in prison.
<b>Clinician Code</b>	<b>In your view, taking into account potential amendments, would the draft tool be an acceptable and useful brief outcome/review tool for use with clients (i.e. to support current or future processes of review of treatment progress in relation to alcohol and drug use)? Please add any other relevant comments.</b>
1	Yes
2	Some good assessments of psycho-social factors which would be useful to compare over time. Perhaps an overview question for client: "Do you think your drug taking has improved?"
3	No, as above.
4	Unless trailed with mixed groups for 3 months it is hard for me to say.
5	Yes! I think the draft tool would be acceptable and useful brief outcome/review tool if its length is shortened and questions made more specific.
6	yes - it's relatively short, not complicated & good way to check clients progress.

<b>8</b>	Yes; its quite easy to answer by the clients and basic information needed are asked in this draft tool.
<b>9</b>	The questions were answered directly by the client and he fed back on difficult questions. Ensuring his comfort and honesty was my concern.
<b>10</b>	Yes, definitely. However, would be good to compare organisational constructs and how this influences perceptions of progress for different client groups i.e. predominantly Pacific clients may perceive progress as being from the same village or a relative of their Pacific worker.
<b>12</b>	Yes
<b>13</b>	Yes. Both people who filled in this tool spent a long time reflecting on the content and their progress. Both got very positive feedback in terms of drug use and identified issues needing strengthened. Tool definitely contributes to treatment planning and goal setting for client and clinician.

## APPENDIX 8: FINAL PROTOTYPE INSTRUMENT (VERSION 4 OF 4)

### Draft ADOM measure: Part A

All questions relate to the past four weeks

The questions do not apply to prescribed medication; however, any misuse of prescription medication should be included e.g. taking more than prescribed/injecting of medications not intended to be injected

If the client has been an inpatient or in custody for more than 22 days during the last four weeks, do not complete the questionnaire.

#### IN THE PAST FOUR WEEKS:

1. On how many days did you drink alcohol?

Days used (0-28)

2. How many standard drinks did you consume on a typical drinking day?

(1 Standard Drink = 1 can of beer, 100ml wine, or 1 double of spirits, where  
bottle of wine = 7 or jug of beer = 3 or 750ml spirits = 23)

#### IN THE PAST FOUR WEEKS, ON HOW MANY DAYS DID YOU USE:

	Days used (0-28)	
3. Cannabis		
4. Amphetamine-type stimulants e.g. methamphetamine, speed, methylphenidate (Ritalin)		
5. Opioids		
6. Sedatives/tranquilisers E.g. diazepam (Valium), temazepam		
7. Any other drugs. e.g. ecstasy, hallucinogens, solvents, GHB etc Specify what drugs: _____  (interviewer: if "other drugs" contains substances covered in the above questions please return to the appropriate question and recode)	_____ _____ _____	— — —
8. How many cigarettes have you smoked per day, on average (if non-smoker, enter zero):		

9. Please put a tick in the right hand column to identify main substance of concern (for some clients there may be more than one).

#### IN THE PAST FOUR WEEKS:

10. On how many days have you injected drugs?  (if none, enter zero and go to question 12)	Days injected (0-28)	
11. Have you shared any injecting equipment? (sharing means using someone else's equipment which has already been used or someone using yours regardless of whether you were both present at the time or not; equipment includes needles, syringes, water, dregs, tourniquets, spoons, filters)	Yes	No

Please turn over

**Draft ADOM Measure: Part B**

**IN THE PAST FOUR WEEKS:**

12. How often has your physical health interfered with your day-to-day functioning?

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

13. How often has your psychological or mental health interfered with your day-to-day functioning?

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

14. How often has your alcohol or drug use led to conflict 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. 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)?

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

16. How often have you engaged in paid employment, voluntary work, study, parenting or other care giving activities?

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

17. How often 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. 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)?

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

## APPENDIX 9: PARTICIPANT INFORMATION SHEETS AND CONSENT FORM FOR CLIENTS PARTICIPATING IN PSYCHOMETRIC TESTING STAGE OF TOOL DEVELOPMENT

### Alcohol and Other Drug Treatment Outcomes - ADOM Testing Stage

#### ~PARTICIPANT INFORMATION SHEET: Auckland~

**Can you help?** – Our research team has developed a tool that we hope will help measure clinical outcomes for people who are having problems with alcohol or other drug use. The questionnaire was designed following extensive consultation with the treatment sector, including consumers (through the ADOPT I project). When the tool is finished it will help to monitor the progress of those in substance use treatment. You are invited to take part in a study to help us test the tool.

**What do you have to do?** – All it will involve is up to 15-30 minutes of your time on three occasions over a period of 5 – 7 weeks. On the first and third of these occasions you and your clinician will fill out the newly designed tool along with two alternative tools. On the second occasion, you will only fill out the newly designed tool. When we have enough participants we will compare the results from the three tools. This will tell us if the new tool is useful in measuring changes or progress for people in treatment.

**Will anyone know you are involved?** – Your participation in the study is **confidential**. This means that no one outside of your AOD clinician and the research team will know that you were involved. The final report will ensure that no participants are identified and no material will disclose any information outside the aims of this study. For the purpose of the study the results of your tools will be de-identified (given a number) and only used in conjunction with all the other results.

**Do you have to be involved?** – The study is **voluntary**. This means that you do not have to complete the tool with the clinician/researcher if you do not want to. Whether or not you choose to take part will not affect the treatment that you receive from your clinician.

**What are the benefits?** – When enough tools have been completed the results will be analysed. These results will be used to help a range of people who have alcohol and drug use problems. The tool may also make you think a bit more about your own substance use and form a useful part of your treatment. If you would like to know what we find then you can indicate this on the consent form or contact us at the address below and we will send you a summary of the findings, or advise you of the website where you can get a copy of the final report.

**Are there any risks?** – If you find the tool too hard or upsetting, **you are allowed to stop**. Your clinician can talk about any strong feelings you might have at the time you are completing it. In the case of the researcher, they will check with you whether you need to contact someone for additional support. Below we have listed alternative places you can access help if you are unable to do this through your clinician. You can also contact the research team on the contact numbers over the page.

**ACC Cover** – In the unlikely event of a physical injury as a result of your participation in this study, you may be covered 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 expenditure and there may be no lump sum compensation payable. There is no cover for mental injury unless it is the 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.

**What are your rights?** – If you have any queries or concerns regarding your rights as a participant in this study, you may wish to contact a Health & Disability Advocate, telephone 0800 423 638. In the unlikely event of a physical injury as a result of your participation in this study, you will be covered by the accident compensation legislation within its limitations.

Thanks for considering this proposal.

This study has received ethical approval from the National Ethics Committee.

*Principal Investigator - Dr Gail Robinson, 50 Carrington Rd, Pt Chevalier, Auckland. Ph: 09-8155830, Fax 09-8155847. Email: gail.robinson@waitematadhb.govt.nz*

## Alcohol and Other Drug Treatment Outcomes - ADOM Testing Stage

### *~PARTICIPANT INFORMATION SHEET: Christchurch~*

**Can you help?** – Our research team has developed a tool that we hope will help measure clinical outcomes for people who are having problems with alcohol or other drug use. The questionnaire was designed following extensive consultation with the treatment sector, including consumers (through the ADOPT project). When the tool is finished it will help to monitor the progress of those in substance use treatment. You are invited to take part in a study to help us test the tool.

**What do you have to do?** - All it will involve is up to 15-30 minutes of your time on three occasions over a period of 5 – 7 weeks. On the first and third of these occasions you and your clinician will fill out the newly designed tool along with two alternative tools. On the second occasion, you will only fill out the newly designed tool. If you have already left the service by the time the second or third occasion is due, a researcher will ring you to complete the tool over the phone with you. When we have enough participants we will compare the results from the three tools. This will tell us if the new tool is useful in measuring changes or progress for people in treatment.

**Will anyone know you are involved?** – Your participation in the study is **confidential**. This means that no one outside of your AOD clinician and the research team will know that you were involved. The final report will ensure that no participants are identified and no material will disclose any information outside the aims of this study. For the purpose of the study the results of your tools will be de-identified (given a number) and only used in conjunction with all the other results.

**Do you have to be involved?** - The study is **voluntary**. This means that you do not have to complete the tool with the clinician/researcher if you do not want to. Whether or not you choose to take part will not affect the treatment that you receive from your clinician.

**What are the benefits?** – When enough tools have been completed the results will be analysed. These results will be used to help a range of people who have alcohol and drug use problems. The tool may also make you think a bit more about your own substance use and form a useful part of your treatment. If you would like to know what we find then you can indicate this on the consent form or contact us at the address below and we will send you a summary of the findings, or advise you of the website where you can get a copy of the final report.

**Are there any risks?** - If you find the tool too hard or upsetting, **you are allowed to stop**. Your clinician can talk about any strong feelings you might have at the time you are completing it. In the case of the researcher, they will check with you whether you need to contact someone for additional support. Below we have listed alternative places you can access help if you are unable to do this through your clinician. You can also contact the research team on the contact numbers below.

**ACC Cover** - In the unlikely event of a physical injury as a result of your participation in this study, you may be covered 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 expenditure and there may be no lump sum compensation payable. There is no cover for mental injury unless it is the 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.

**What are your rights?** – If you have any queries or concerns regarding your rights as a participant in this study, you may wish to contact a Health & Disability Advocate, telephone 03 377 7501. In the unlikely event of a physical injury as a result of your participation in this study, you will be covered by the accident compensation legislation within its limitations.

### ***Thanks for considering this proposal.***

This study has received ethical approval from the National Ethics Committee.

*Principal Investigator: Daryle Deering: National Addiction Centre, University of Otago, PO Box 4345, Christchurch, email: daryle.deering@chmeds.ac.nz, phone: (03) 364 0480*



## Routine Outcome Measurement Questionnaire - ADOM

### Final Testing

Principle Investigators: Daryle Deering, Gail Robinson

### ~CONSENT FORM~

Please tick the relevant boxes

- |   |                              |                                |
|---|------------------------------|--------------------------------|
| ➤ I wish to have an interpreter   | Yes <input type="checkbox"/> | No <input type="checkbox"/>    |
| ➤ E hiahia ana ahau ki tetahi Kaiwhakamaori/kaiwhaka pakeha korero  | Ae <input type="checkbox"/>  | Kao <input type="checkbox"/>   |
| ➤ Ou te mana'o ia I ai se fa'amatala upu  | Ioe <input type="checkbox"/> | Leai <input type="checkbox"/>  |
| ➤ Oku ou fiema'u ha fakatonulea   | Io <input type="checkbox"/>  | Ikai <input type="checkbox"/>  |
| ➤ Ka inangaro au I tetai tangata uri reo  | Ae <input type="checkbox"/>  | Kare <input type="checkbox"/>  |
| ➤ Fia manako au ke fakaaoga e taha tagata fakahokohoko kupu   | E <input type="checkbox"/>   | Nakai <input type="checkbox"/> |
| ➤ I understand that taking part in the study is entirely my own choice.   | Yes <input type="checkbox"/> | No <input type="checkbox"/>    |
| ➤ I understand that my participation in this study is entirely confidential. There will be nothing in any reports on the study that will identify me. | Yes <input type="checkbox"/> | No <input type="checkbox"/>    |
| ➤ I consent to take part in the study.  | Yes <input type="checkbox"/> | No <input type="checkbox"/>    |

Name of participant .....

Signature .....

Date .....

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

.....  
.....  
.....  
.....  
.....

## APPENDIX 10: COMPARISON MEASURES USED DURING PSYCHOMETRIC TESTING STAGE OF TOOL DEVELOPMENT

### DEGREE OF DRUG USE INDEX (DDI)

These questions are about your *recent substance use* and ask you to think about how frequently, on average, you used substances in the last four weeks. Take your time to think about the last four weeks before answering.

#### NON - INJECTING SUBSTANCE USE

##### 1. ALCOHOL (circle number of standard drinks consumed per week)

1. How much alcohol per week did you drink on average in the last 4 weeks?

	0	1	2	3	4	5
F E M A L E	N I L	1 - 1 4	1 5 - 2 1	2 2 - 2 8	2 9 - 3 5	3 6 +
M A L E	N I L	1 - 2 1	2 2 - 2 8	2 9 - 3 5	3 6 - 4 2	4 3 +
S U B T O T A L						

##### 2. Tranquilisers / Sedatives / Hypnotics

1. Have you used any tranquilisers / sedatives / hypnotics in the last 4 weeks?  
(e.g. benzodiazepines such as valium, halcion, ativan, clonazepam, imovane, etc)

	Yes	No
If Yes circle whether:	Prescribed	Non-prescribed
		Both

2. How frequently on average?

0	1	2	3	4	5
N I L U S E	O N C E P E R W E E K O R L E S S	M O R E T H A N O N C E P E R W E E K	D A I L Y	2 - 3 T I M E S D A I L Y	4 O R M O R E T I M E S D A I L Y
S U B T O T A L					

### 3. Cannabis

1. Have you used cannabis in the last 4 weeks? Yes No  
How frequently (on average)?

0	1	2	3	4	5
N I L U S E	O N C E P E R W E E K O R L E S S	M O R E T H A N O N C E P E R W E E K	D A I L Y	2 - 3 T I M E S D A I L Y	4 O R M O R E T I M E S D A I L Y
S U B T O T A L					

### 4. Other non-injecting substance use

1. Have you used any other drugs (not-injected) in the last 4 weeks i.e. other than tranquilisers/sedatives/ hypnotics, cannabis and alcohol? (exclude any medications prescribed for psychiatric/medical disorders)

Yes No

2. How frequently (on average)?

0	1	2	3	4	5
N I L U S E	O N C E P E R W E E K O R L E S S	M O R E T H A N O N C E P E R W E E K	D A I L Y	2 - 3 T I M E S D A I L Y	4 O R M O R E T I M E S D A I L Y
S U B T O T A L					

If you used any other non-injected drugs what did you use and how often  
(tick columns below)

*NB not scored – i.e. information to aid discussion only*

	N I L U S E	O N C E P E R W E E K	M O R E O F T E N T H A N O N C E A W E E K	D A I L Y	2 - 3 T I M E S D A I L Y	4 O R M O R E T I M E S D A I L Y
I ) A M P H E T A M I N E L I K E S T I M U L A N T S						
S P E C I F Y						
I I ) H A L L U C I N O G E N S .						
S P E C I F Y						
I N H A L A N T S						
S P E C I F Y						
O T H E R						
S P E C I F Y						

## 5. Nicotine

1. How many cigarettes did you smoke on average per day in the last 4 weeks?

NB. 50gms tobacco = 100 retail cigarettes

0	1	2	3	4	5
N O N E	5 O R L E S S	6 - 1 0	1 1 - 1 5	1 6 - 2 0	M O R E T H A N 2 0

## INJECTING DRUG USE

1. Have you injected any drugs in the last 4 weeks?

Yes No

2. How frequently (on average)?

0	1	2	3	4	5
N I L U S E	O N C E P E R W E E K O R L E S S	M O R E T H A N O N C E P E R W E E K	D A I L Y	2 - 3 T I M E S D A I L Y	4 O R M O R E T I M E S D A I L Y

S U B T O T A L

If you injected what specific drugs did you use and how often? (tick columns below)

\* NB not scored i.e. information to aid discussion

N I L U S E	O N C E P E R W E E K	M O R E O F T E N T H A N O N C E A W E E K	D A I L Y	2 - 3 T I M E S D A I L Y	4 O R M O R E T I M E S D A I L Y
----------------	-----------------------------	--	-----------	---------------------------------	--

I ) O P I O I D S

I I )  
A M P H E T A M I N E -  
L I K E  
S T I M U L A N T S

S P E C I F Y :

I I I )  
T R A N Q U I L L I S E R S  
/

S E D A T I V E S

S P E C I F Y :

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 number on each line)

<u>ACTIVITIES</u>	Yes, Limited A Lot	Yes, Limited A Little	No, Not Limited At All
a. <b>Vigorous activities</b> , such as running, lifting heavy objects, participating in strenuous sports	1	2	3
b. <b>Moderate activities</b> , 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 <b>several</b> flights of stairs	1	2	3
e. Climbing <b>one</b> flight of stairs	1	2	3
f. Bending, kneeling or stooping	1	2	3
g. Walking <b>more than one kilometre</b>	1	2	3
h. Walking <b>half a kilometre</b>	1	2	3
i. Walking <b>100 metres</b>	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 <b>amount of time</b> you spent on work or other activities	1	2
b. <b>Accomplished less</b> than you would like	1	2
c. Were limited in the <b>kind</b> of work or other activities	1	2
d. Had <b>difficulty</b> 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 <b>amount of time</b> you spent on work or other activities	1	2
b. <b>Accomplished less</b> than you would like	1	2
c. Didn't do work or other activities as <b>carefully</b> 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)

Not at all .....1

Slightly .....2

Moderately .....3

Quite a bit.....4

Extremely .....5

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

(circle one)

No bodily pain .....1

Very mild.....2

Mild .....3

Moderate .....4

Severe .....5

Very severe .....6

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)

Not at all .....1

A little bit .....2

Moderately .....3

Quite a bit .....4

Extremely .....5

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 -

(circle one number on each line)

	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)

All of the time .....1

Most of the time .....2

Some of the time .....3

A little of the time .....4

None of the time .....5

11. How TRUE or FALSE is each of the following statements for you?

(circle one number on each line)

	<b>Definitely True</b>	<b>Mostly True</b>	<b>Don't Know</b>	<b>Mostly False</b>	<b>Definitely False</b>
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

**ENGLISH (AUSTRALIA/NEW ZEALAND) SF-36**

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



## APPENDIX 11: TREATMENT OUTCOMES PROFILE (TOP)

# Treatment Outcomes Profile (TOP)



**National Treatment Agency  
for Substance Misuse**

### About the TOP

The Treatment Outcomes Profile (TOP) is a new drug treatment outcome monitoring tool that has been developed by the NTA in partnership with drug treatment providers in over 70 sites across England. It is applicable for use in all of the structured treatment modalities as defined by Models of Care for Treatment of Adult Drug Misusers: Update 2006. For the first time, service users, clinicians, service managers and commissioners will be able to obtain objective and comparable data about real improvements in service users' lives that will be able to inform and improve practice on both an individual and strategic level.

The TOP is a simple set of questions that will improve clinical practice by enhancing assessment and care plan reviews for clients. The data it provides will improve performance monitoring. Data will be reported into the National Drug Treatment Monitoring System (NDTMS) from October 2007 and results fed back to providers and commissioners from March 2008. There will also be monthly exception reports from NDTMS on non-returns and multiple submissions.

The TOP should be completed at the start of each client's treatment journey to record a baseline of behaviour in the month leading up to starting a new treatment journey. Follow up scores should be recorded every three months during treatment (usually at the same time as a care plan review) to capture changes in behaviour. It should also be completed at discharge and may be used by some services to measure post-discharge outcomes. Note: when services are introducing TOP, existing clients (as well as new presentations) should also have TOP forms completed with them as part of the care plan review process.

### How to complete the TOP

Start by entering:

- Name and identifiers of your client (date of birth and gender)
- Your name
- Date of assessment
- The stage at which the TOP is being completed – modality start, care plan review, discharge or post-discharge.

Types of responses:

- Timeline – invite the client to recall the number of days in each of the past four weeks on which they did something – for example, the number of days they used heroin. You then add these to create a total for the past four weeks in the blue NDTMS box
- Yes and no – a simple tick for yes or no, then a "Y" or "N" in the blue NDTMS box
- Rating scale – a 20-point scale from poor to good. Together with the client, mark the scale in an appropriate place and then write the equivalent score in the blue NDTMS box.

**You should aim to ask and complete every question. Do not leave any of the blue boxes blank. Enter "NA" if the client refuses to answer a question or, after prompting, cannot recall.**

(See TOP keyworker guidance for more detailed information: [www.nta.nhs.uk/TOP](http://www.nta.nhs.uk/TOP))

### Alcohol units converter

Drink	%ABV	Units
Pint ordinary strength lager, beer or cider	3.5	2
Pint strong lager, beer or cider	5	3
440ml can ordinary strength lager	3.5	1.5
440ml can strong lager, beer or cider	5	2
440ml can super strength lager or cider	9	4
1 litre bottle ordinary strength cider	5	5
1 litre bottle strong cider	9	9

Drink	%ABV	Units
Glass of wine (175ml)	12	2
Large glass of wine (250ml)	12	3
Bottle of wine (750ml)	12	9
Single measure of spirits (25ml)	40	1
Bottle of spirits (750ml)	40	30
275ml bottle alcopops	5	1.5

**Thank you for your contribution to the TOP**

# Treatment Outcomes Profile

<input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/>
<b>Name of client</b>	<b>D.O.B. (dd/mm/yyyy)</b>	<b>Name of keyworker</b>
<input type="text"/> / <input type="text"/> / <input type="text"/>	<b>Gender:</b> M <input type="checkbox"/> F <input type="checkbox"/>	<b>Treatment stage:</b> Modality start <input type="checkbox"/> Care plan review <input type="checkbox"/>
<b>TOP interview date (dd/mm/yyyy)</b>		Discharge <input type="checkbox"/> Post-discharge <input type="checkbox"/>

## Section 1: Substance use

Record the average amount on a using day and number of days substances used in each of past four weeks

	Average	Week 4	Week 3	Week 2	Week 1	Total
a Alcohol	<input type="text"/> units/day	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
b Opiates	<input type="text"/> g/day	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
c Crack	<input type="text"/> g/day	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
d Cocaine	<input type="text"/> g/day	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
e Amphetamines	<input type="text"/> g/day	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
f Cannabis	<input type="text"/> spliff/day	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
g Other problem substance?	<input type="text"/> g/day	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28

Name.....

## Section 2: Injecting risk behaviour

Record number of days client injected non-prescribed drugs in past four weeks (if no, enter zero and go to section 3)

	Week 4	Week 3	Week 2	Week 1	Total
a Injected	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
b Inject with needle or syringe used by someone else?	Yes <input type="checkbox"/> No <input type="checkbox"/>				<input type="text"/> Enter 'Y' if any yes, otherwise 'N'
c Inject using a spoon, water or filter used by someone else?	Yes <input type="checkbox"/> No <input type="checkbox"/>				

## Section 3: Crime

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

	Week 4	Week 3	Week 2	Week 1	Total
a Shoplifting	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
b Drug selling	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
c Theft from or of a vehicle	Yes <input type="checkbox"/> No <input type="checkbox"/>				<input type="text"/> Enter 'Y' if any yes, otherwise 'N'
d Other property theft or burglary	Yes <input type="checkbox"/> No <input type="checkbox"/>				
e Fraud, forgery and handling stolen goods	Yes <input type="checkbox"/> No <input type="checkbox"/>				<input type="text"/> Enter 'Y' or 'N'
f Committing assault or violence	Yes <input type="checkbox"/> No <input type="checkbox"/>				

## Section 4: Health and social functioning

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

<b>Poor</b>	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	<b>Good</b>	<input type="text"/> 0-20
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Record days worked and at college or school for the past four weeks

	Week 4	Week 3	Week 2	Week 1	Total
b Days paid work	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28
c Days attended college or school	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-7	<input type="text"/> 0-28

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

<b>Poor</b>	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	<b>Good</b>	<input type="text"/> 0-20
-------------	--	-------------	---------------------------

Record accommodation items for the past four weeks

e Acute housing problem	Yes <input type="checkbox"/> No <input type="checkbox"/>	<input type="text"/> Enter 'Y' or 'N'
f At risk of eviction	Yes <input type="checkbox"/> No <input type="checkbox"/>	<input type="text"/> Enter 'Y' or 'N'

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

<b>Poor</b>	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	<b>Good</b>	<input type="text"/> 0-20
-------------	--	-------------	---------------------------



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