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**The Brief Treatment Outcome Measure:  
Detoxification, Rehabilitation & Counselling  
(BTOM)  
Manual**

**NDARC Technical Report No. 165**

**THE BRIEF TREATMENT  
OUTCOME MEASURE:  
DETOXIFICATION,  
REHABILITATION &  
COUNSELLING  
(BTOM)**

**MANUAL**

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#New South Wales Health Department, Sydney**

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## EXECUTIVE SUMMARY

A brief, multidimensional instrument has been designed to monitor treatment outcomes for alcohol and other drug (AOD) clients. A core instrument is applicable for use with all treatment types and drug classes with four treatment specific modules for opioid maintenance pharmacotherapy, detoxification, rehabilitation and counselling treatment types. The Brief Treatment Outcome Measure (BTOM) standardises data collection from these treatment types to provide data on service utilisation, client population profiles, treatment needs, the types of treatment delivered and outcomes achieved. It also serves as a tool for use in treatment evaluation research.

Treatment outcome is measured by scales developed or adapted from other instruments across the domains of dependence, blood borne virus exposure risk, drug use, health, psychological functioning and social functioning.

The BTOM is typically administered at the commencement of treatment (or intervention, in the case of a research study) and at follow-up or review intervals of no less than 3 months. It takes approximately 15 minutes to administer and can be easily scored by the clinician or researcher. The domains included within the BTOM are intended both to enable evaluation and monitoring across services and to inform the clinical management of individual clients.

A psychometric and clinical evaluation of the BTOM in opioid maintenance pharmacotherapy services has been previously published. This report outlines the psychometric properties and clinical trialling of the BTOM in detoxification, counselling and rehabilitation services. Results from the 12-month clinical trial and a psychometric evaluation study indicate that the BTOM has good reliability, acceptable validity and is capable of measuring change in treatment outcome. An examination of the feasibility of following up clients who have left treatment is presented. Findings from a survey of clinicians using the BTOM indicate that clinicians in general approve of the BTOM content and find the instrument to be clinically useful.

## **ACKNOWLEDGEMENTS**

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## **1.0 Introduction**

Drug and alcohol agencies have used a variety of methods to measure the effectiveness of the treatments they provide. However, for meaningful comparisons to be made across the Alcohol and Other Drug treatment sector, a standardised outcome monitoring system must be developed. It is important that such a system takes into account differences in client characteristics, treatment settings and service provision. The 1999 NSW Drug Summit specifically emphasised the need for a standardised measurement of treatment outcomes across alcohol and other drug treatment services in NSW (NSW Drug Summit, 1999).

The BTOM is a brief, multi-dimensional instrument designed for the monitoring of changing service delivery patterns and the standardised assessment of outcomes for clients receiving a variety of alcohol and other drug treatments. It is intended that the BTOM be used both to enable evaluation and monitoring across services and to inform the clinical management of individual clients. It will investigate the characteristics of persons entering treatment, capture the disability of the client population, document treatment outcomes and inform the planning and development of treatment services. Key considerations in the design of the BTOM were that it place minimal time demands on clinical staff and clients, be acceptable and easy to administer and interpret and have good psychometric properties.

The Brief Treatment Outcome Measure (BTOM) was developed for the routine measurement of treatment outcomes for clients receiving opioid maintenance pharmacotherapy (OMP), rehabilitation, counselling and detoxification. It is also intended for use in treatment evaluation research. The psychometric properties of the BTOM in OMP have been reported elsewhere (Lawrinson, Copeland *et al.* 2003). This report outlines the findings from a 12 month clinical trial and psychometric evaluation of the BTOM was conducted in detoxification, rehabilitation and counselling services.

The BTOM is typically administered at the commencement of treatment (or intervention, in the case of a research study) and at follow-up or review intervals of no less than 3 months. It takes approximately 15 minutes to administer and can be easily scored by the clinician or researcher. The domains included within the BTOM are intended both to enable evaluation and monitoring across services and to inform the clinical management of individual clients. It is a means of formalising the monitoring process and serves as a stimulus for deeper exploration of the client's needs. Importantly, it enables clinicians to provide feedback to clients via the scoring system.

At the agency and jurisdictional level the BTOM provides a comparable dataset on the drug and alcohol services available, the utilisation of these services, client population profiles, treatment needs, the types of treatment delivered and outcomes achieved. This information serves to facilitate increased awareness of, and improved responsiveness to, the sector's needs by the government, treatment and other health agencies, and the broader community.

## **1.1 Background**

The NSW Health Department in partnership with the National Drug and Alcohol Research Centre (NDARC) established the Monitoring and Outcomes Project (MOP). The major goals of this project were to establish a state-wide treatment data set, and following this, to introduce the regular assessment of treatment outcomes using a brief outcome measure.

Collection of the NSW Minimum Data Set for Clients of Alcohol and Other Drug Treatment Services (NSW MDS) commenced on July 1, 2000 (NSW Health Department, 2002). The data collection includes a nationally agreed set of data items, comprising the National Minimum Data Set for Clients of Alcohol and Other Drug Treatment Services (AIHW, 2002) and additional items to describe the treatment services being provided.

The next phase of this project was the addition of an outcomes module to complement the data collection. This is consistent with the format of the NSW MDS. A review of the existing treatment outcome measures (Teeson *et al.*, 2000) and a review of the literature on routine outcomes monitoring and the predictors of outcome (Copeland *et al.*, 2000) were prepared as background for this project.

## **1.2 Overview**

The BTOM has the following properties.

1. It incorporates the NSW MDS for Clients of Alcohol and Other Drug Treatment Services. The content of the NSW MDS (and consequently the BTOM) is reviewed and updated versions are released annually on July 1. It is important to ensure that the current version of the BTOM is being used
2. Treatment outcome is measured by scales developed or adapted from other instruments across the domains of dependence, blood borne virus exposure risk, drug use, health, psychological functioning and social functioning.
3. Additional items are collected, particularly those that relate to service provision.
4. It is brief, easy to administer and can be easily scored.
5. Its scales have good reliability and acceptable validity.



### **1.3 Development of the BTOM**

The BTOM was systematically developed over 6 phases:

1. A review of available measures of treatment outcome revealed over 300 instruments that were examined as possible outcome measures. While the Opioid Treatment Index (Darke *et al.*, 1992), developed in Australia met many of the requirements set by the reviewers, it was recommended that it be revised and shortened for use as a routine outcome assessment tool suitable for use across the alcohol and other drugs field with a range of substance use disorders (Teeson *et al.*, 2000).
2. A content and implementation advisory group, comprising representatives from National Drug and Alcohol Research Centre, the Drug Programs Bureau, NSW Health Department and senior government, non-government and private alcohol and other drug treatment sector service providers was established to guide the development of the BTOM.
3. Clients receiving rehabilitation, detoxification and counseling services were recruited and interviewed from public and non-government agencies in Sydney to evaluate the psychometric properties of the BTOM.
4. A 12-month clinical trial of the BTOM was conducted at selected rural and metropolitan Area Health Services across NSW for clients receiving rehabilitation, detoxification and counseling services. The feasibility of administering the BTOM as part of routine clinical practice, including conducting follow-up on clients who had left treatment, was investigated.
5. Clinicians who had participated in the clinical trial were approached to complete a survey designed to elicit quantitative and qualitative feedback on their experience of using the BTOM. The survey results were used to further refine the content of the BTOM, inform the development of guidelines for the use of the instrument and identify business processes necessary for the successful integration of the BTOM into routine clinical practice.
6. A final version was developed in the light of above and revisions of NSW MDS.

## **2.0 Structure of the BTOM**

The BTOM comprises 7 sections:

- A. Demographic Information
- B. Drug Use and Drug Use Related Behaviour
- C. Health and Psychological Functioning
- D. Social Functioning
- E. Treatment Specific Information Module
- F. Commencement of Treatment Information
- G. Cessation of Treatment Information

Sections A, F, G items and some items in Section B are NSW MDS items. The aim of these questions is to gather information about the client and their treatment history in a manner that is consistent with the state-wide collection. If required, guidelines for the use of these questions can be found in the “New South Wales Drug Treatment Data Dictionary” (NSW Health Department, 2002).

The BTOM contains six scales, which can provide a score for each client:

- Severity of Dependence Scale (to the drug that has led the client to seek treatment) – 5 items (Gossop *et al.*, 1995)
- Blood borne virus exposure risk (due to injecting practices) – 7 items, 2 questions
- Occasions of drug use (in the last 30 days) – 7 items
- Number of categories of drugs used by the client – 7 items
- Health – 1 item
- Psychological well being – 8 items, 1 question
- Social functioning – 6 items

The scale scores are the principle means of assessing changes in treatment outcome and can be related to the other service delivery and client characteristic variables in the instrument. A Scale Score Summary Sheet and an explanation of the scales and how to calculate scores can be found in Appendix 4.

In addition to the NSW MDS items and the scales there are 5 additional questions in Sections B, C and D. Section E consists of questions relating to the treatment that the client is or will be receiving.

## **3.0 Administering the BTOM**

### **3.1 General**

The BTOM is an interviewer administered questionnaire that typically takes 15 minutes to complete. It is suitable for use with English speaking clients entering into a new treatment episode. “Face-to-face” administration of the BTOM is recommended. Where this is not feasible, such as following up clients who have left treatment, a telephone interview may be conducted. It has been demonstrated that client self-administration of the BTOM yields poor reliability and hence is not recommended. The BTOM has primarily been developed to be used by clinicians as an outcome monitoring instrument and for treatment outcome research. Completion times may vary if the BTOM is utilised as a part of assessment or case management activities where other measures, additional items or further discussion may be required. It is recommended that such additions are made at the end of the relevant section of the questionnaire.

It is essential that staff and research personnel administering the BTOM be appropriately trained and supervised in its use. Both the accuracy of the information obtained from clients and successful integration into routine clinical practice depend upon the administrator’s familiarity with the BTOM’s content and purpose. A “Brief Treatment Outcome Measure (BTOM): Administration and Procedures Manual” (NSW Health Department, 2003) has been produced to assist in the administration of the questionnaire.

Clients should be given an explanation of how the BTOM may assist them with objective assessment of their treatment progress and assured that the information will be treated confidentially and not be used to deny or limit their treatment. It is helpful to explain that the BTOM only takes fifteen minutes to complete. An opportunity should be given for the clients to ask questions and raise concerns about the interview.

In order to extract the full benefit from treatment outcome measurement and to be able to make valid conclusions from aggregated data, particularly for evaluation research, it is important to make all reasonable attempts to conduct the follow-up interviews on clients whether or not they are still receiving treatment. This is clearly more challenging when clients have left treatment, as they must be contacted specifically for the purpose of conducting a follow-up interview. In order to maximize the likelihood of contacting clients who have left or completed treatment it is important to collect as much information as possible on the “BTOM Follow-up Contact Form” (Appendix 5) at the commencement of treatment. In order to minimise costs, it is recommended that the interviews be conducted over the phone, at a time convenient for the client. BTOM questionnaires should not be

posted to clients. Section 3. of the “BTOM Follow-up Contact Form”, “Follow-up Attempts” should be completed to aid in contacting the client and in providing an indication of the time agencies have invested in following up clients. In addition, appropriate administrative procedures should be in place at the agency level to ensure that staff are made aware of when a client is due to be reviewed.

Whenever possible the BTOM follow-up interview should be administered by a staff member not directly involved with the client’s treatment so as to lessen the bias that may result from clients feeling reluctant, for whatever reason, to provide honest answers. Self-reported data on drug use related behaviour has been shown to be consistent with urine analysis and collateral interviews (Kilpatrick *et al.*, 2000). Accuracy can be improved when administrators have been trained to use the instruments consistently and when clients are motivated to cooperate with the administrator (Litten & Allen, 1992; cited in Center for Substance Abuse Treatment, 1995).

### **3.2 Timing**

Most of the BTOM questions address client behaviour or perceptions in the preceding 3 months. This time interval was chosen for outcome measurement in order to be representative of a client’s longer term drug use related behaviour whilst at the same time maximising the accuracy of client recall (Copeland *et al.*, 2000).

The BTOM is typically administered at the commencement of treatment (or intervention, in the case of a research study) and at follow-up or review intervals of no less than 3 months. The time interval may vary according to the needs identified by the agency, other key stakeholders or researchers. However, it is important that 90 days remains the minimum time interval between interviews.

The “baseline” BTOM interview can be included as part of the assessment or admission process or can be conducted during the induction phase of treatment. It is recommended that the administration of the BTOM be included on either the admission or induction checklist. Admission is the assessment and data collection process undertaken prior to the commencement of treatment. Induction refers to the first instance of actual treatment received by the client.

### **3.3 BTOM Administration Summary Protocol**

#### **Refer to Tables 3.1 and 3.2 for timing of administration of BTOM items**

General:

- All questions require an answer. Neither skip questions nor leave blanks sections of the questionnaire. If the client refuses to answer a question, indicate this on the questionnaire.
- All answers should be based on the client's response, not the clinician's guess or assumption.
- Some questions are preceded by a preamble, printed in bold, which is worded to aid the client in interpreting the question. It is important that these are read to the client.
- It is likely that some agencies may develop their own business rules relating to the data collection. If this occurs, the key requirement is consistency across all data collected within the agency.
- A number of public sector and commercially available software platforms incorporate the BTOM. Most of these platforms are capable of scoring the instrument and generating the BTOM Scores Summary Sheet (Appendix 4).

**Table 3.1 Timing of data collection for clients receiving rehabilitation, detoxification or counselling treatment**

Commencement of Treatment & at 3 Monthly Intervals	Commencement of Treatment Only
<p><b>Front page</b>  <i>Agency code / Agency location / PSB code / Client code</i>  Date of interview  Agency name / Area Health Service name / Interviewer name  Commencement of treatment date  Interview type (i.e. baseline, 3, 6, etc months)  Length of interview</p> <p><b>Demographic Information (Section A)</b>  <i>Sex/ /Date of birth</i>  <i>Indigenous status / Country of birth / Preferred language</i>  <i>Principal source of income / Type of accommodation</i>  <i>Living arrangement</i></p> <p><b>Drug Use &amp; Related Behaviour (Section B)</b>  <i>Principal drug of concern</i>  <i>Method of use for principal drug of concern</i>  Severity of dependence scale (Question 11a.-e.)  <i>Other drugs of concern</i>  <i>Injecting drug use</i>  Sharing needle/syringe after someone else had used it  Sharing other injecting equipment  No. of overdoses  Quantity and frequency of alcohol and other drug use (Questions 17-23)</p> <p><b>Health &amp; Psychological Functioning (Section C)</b>  Client perception of own health  Days in hospital  Psychiatric medication  Psychological health scale (Question 27a-h)</p> <p><b>Social Functioning (Section D)</b>  Social functioning scale (Questions 28-33)  No. of arrests  Involvement with child protection services</p> <p><b>(in italics: NSW Minimum Data Set items)</b></p>	<p><b>Section F</b>  <i>Treatment delivery setting</i>  <i>Main treatment provided</i>  <i>Source of referral to treatment</i>  <i>Previous treatment</i></p>
	<p><b>Cessation of Treatment Only</b></p> <p><b>Section G</b>  <i>Cessation of treatment date</i>  <i>Reason for cessation of treatment</i>  <i>Referral to another service</i>  <i>Other services provided</i></p>

**Table 3.2 Treatment specific sections for rehabilitation, counselling and detoxification**

<p><b>Detoxification (section E- Question 36)</b>          (completed on admission to treatment)          Occurrence of past complicated withdrawals requiring medical intervention</p>	<p><b>(Questions 37)</b>          (completed by clinician at cessation of treatment)          Use of medications to assist client withdrawal  <b>(Questions 38-40)</b>          (administered to client at cessation of treatment if available)          Severity rating of withdrawal symptoms          Staff's preparation of client for withdrawal experience          Satisfaction with treatment</p>
<p><b>Rehabilitation (section E- Question 41)</b>          (completed on admission to treatment)          Number of times client has been in residential rehab</p>	<p><b>(Questions 42-44)</b>          (completed by clinician at cessation of treatment)          Number of formal counselling sessions per week          Number of therapeutic group sessions per week          Number of self-help group sessions per week  <b>(Question 45)</b>          (administered to client at cessation of treatment)          Satisfaction with treatment</p>
<p><b>Counselling (section E- Questions 46-48)</b>          (completed on admission to treatment)          What led the client to seek treatment          Main drug use related treatment goal          Services accessed in the last 3 months</p>	<p><b>(Questions 49 &amp; 50)</b>          (completed by clinician at cessation of treatment)          Principal service provided to the client          Main model of counselling used  <b>(Questions 51-53)</b>          (completed at the cessation of follow-up interview)          Extent that main treatment goal has been achieved          Satisfaction with treatment          Satisfaction with counselling relationship</p>

### **3.4 Section A. Demographic Information**

This section contains NSW MDS demographic items which are required for analysing patterns of service utilisation by different population sub-groups and their influence on treatment outcome.

### **3.5 Section B. Drug Use and Drug Use Related Behaviour**

#### **3.5.1 Items 9, 10 & 12.**

These questions are NSW MDS items and need only be collected at the “baseline” interview. Detailed guidelines on the use of the questions can be found in, “2002 – 2003 NSW Minimum Dataset for Alcohol and Other Drug Treatment Services: Data Dictionary and Collection Guidelines.” (NSW Health Department, 2002).

*Item 9. What drug has led you to seek treatment from this service?*

This item is derived from the National Minimum Data Set item, *Principle drug of concern*. This relates to the drug that has led the client to seek treatment from the service for that treatment episode. At the follow-up interview(s) it is important that the answer to this question (i.e. “the drug that has led the client to seek treatment”) does not change from that stated in the baseline questionnaire, given that the aim is to evaluate the treatment intervention in relation to a defined principle drug of concern. If in subsequent interviews it becomes clear that the client no longer regards this drug as being of concern, then that is a positive outcome which needs to be recorded.

*Item 12. What other drugs or alcohol have caused you concern?*

This question relates to drugs, other than the drug that has led the client to seek this episode of treatment, that are causing concern to the client. It is important to emphasise that this question relates to concern with the use not simply the use of other drugs.

#### **3.5.2 Item 11. Severity of Dependence**

When comparing treatment outcomes across treatment settings and modalities, it is important to take into account any differences in the characteristics of client populations. The extent to which a client is dependent upon their drug of choice is one such characteristic.

The Severity of Dependence Scale (SDS) is a 5 item measure of the psychological components of dependence which has demonstrated good psychometric properties. It is suitable for use with a variety of drug classes (Gossop *et al.*, 1995).



### 3.5.3 Items 13 – 17. Injecting Drug Behaviour

It is well established that intravenous drug users that share needles, syringes and other injecting drug equipment are at risk of contracting and transmitting blood borne viruses such as HIV and Hepatitis B & C (MacDonald *et al.*, 1996; Crofts & Aitken, 1997; Thorpe *et al.*, 2002). Injecting drug use also includes intra-muscular and subcutaneous forms of injection. The level of blood borne virus exposure risk (BBVER) is measured in the BTOM by the BBVER Scale. The questions in this section are directed towards the types of injecting drug use behaviour that put the client at risk of either contracting, or transmitting blood borne viruses. Interviewers should be familiar with how these behaviours may be associated with BBV transmission risk. This may assist clients in understanding the meaning of the question and improve the validity of their responses. Some clients may not consider the sharing of injecting equipment with their sexual partner as “true sharing” (Darke *et al.*, 1991). Hence, it is important to clarify that for items 14 and 15 that “sharing” includes the client’s sexual partner. The BBVER Scale is derived from items 14 and 15. See Appendix 4 for the scoring protocol.

*Item 14. How many times in the last 3 months did you use a needle and syringe after someone else had already used it (including your sex partner and even if it was cleaned)?*

When a used needle/syringe is reused any residual traces of blood can be introduced directly into the recipient’s bloodstream. The risk of this occurring may not be markedly reduced even when the needle/syringe is rinsed between injecting episodes, using recommended cleaning techniques (Bodsworth *et al.*, 1994).

*Item 15. Please tell me if you have shared any of the following injecting equipment with anyone else in the last 3 months (Thorpe *et al.*, 2002).*

*Spoon:* Traces of one person’s blood may be left on the spoon, which subsequently could be mixed in with the drug and injected into another person’s bloodstream.

*Water:* One person may have used the water to rinse out the syringe or to mix the drug. Traces of their blood may be present in the water if it is subsequently used by another person.

*Filter:* Traces of one person’s blood may be left on the filter, which when reused could be injected into another person’s bloodstream.

*Tourniquet:* Traces of one person’s blood may be left on the tourniquet. Another person may contact the blood on their fingers whilst handling the tourniquet and subsequently transfer it to their drug mix or injecting site.

*Drug solution/mix:* Traces of one person’s blood may have contaminated the drug mix if they drew more fluid into the syringe after their initial injection.

*Swabs:* Any person’s blood left on a swab may be transferred to another person’s injecting site.

#### **3.5.4 Items 17 – 23. Quantity and Frequency of Alcohol and Drug Use.**

The central treatment outcome measure for alcohol and other drug treatment services is the client's use of alcohol and other drugs (Klee *et al*, 1990). This information is also important in determining the types of treatment that may be required.

The accuracy and veracity of client responses to these seven items depend upon the client's recall of past events and the level of trust established between client and interviewer. In order to minimise errors in reporting that may result from the client's inability to recall events that occurred up to 3 months ago, a one month reporting period is used for these questions. Charts 2 and 3 can be provided to the client to assist in their recall over this period (See Appendix 3).

All of the 7 items in this section must be answered, irrespective of whether the client considers the use of these substances to be of concern. These items should be considered independent of the answers given for items 9 and 12.

In part (a) of each question the client is asked to provide an estimate of the number of days in the last month that they used any of the stated drugs. The total number of days in the "last month" is standardised at 30 days. If the client has not used a particular drug in the last month, zero days should be recorded, and the client directed to the next question. Slang terms are provided for the drugs and routes of administration in this section. This may aid understanding and enhance rapport with the client.

Part (b) of each question is designed to quantify the amount of each drug used, **on a typical day of use**. With the exception of question 17(b), where a Standard Drinks Chart (Chart 3) can assist the client in providing a relatively accurate estimate of their alcohol consumption, obtaining standardised information on the amounts of other drugs consumed is not possible. Doses administered, routes of administration and drug purity vary widely. This instrument aims to measure relative changes in drug use over time rather than providing an accurate measure of the amount of drug consumed. The client is also asked to indicate, by circling the most appropriate response, their usual method of administration for each drug. This may aid in quantification and provides information on patterns of drug use and their associated harms.

Two scales for outcome measurement can be derived from this section:

The Occasions of Drug Use Scale (ODUS) can be calculated for each class of drugs by multiplying the number of days of use, (part a) by the number of units of use on a typical day, (part b), giving the number of occasions of drug use in the last month for each of the 7 classes of drugs (Refer to Appendix 4).

The Polydrug Use Scale is the sum of different classes of drugs taken by the client in the last month.

### **3.6 Section C. Health and Psychological Functioning**

An 8-item psychological functioning scale was adapted from the Depressive Symptom, General Mental Distress and Internal Mental Distress Indices of the Global Appraisal of Individual Needs (Dennis *et al.*, 1993).

The relationship between opioid use and psychiatric pathology is well established. Clients suffering mood and anxiety disorders who demonstrate significant distress have been shown to have poorer outcomes than other clients. (eds. Ward *et al.*, 1998). The current state of a client's psychological health is therefore likely to be a factor affecting their treatment outcome. This and other factors affecting treatment outcome need to be characterized if meaningful comparisons are to be made between treatment types and population sub-groups.

The 8 sub-items in this question are each answered by circling either "YES" or "NO". The Psychological Functioning (PFS) Scale score has been derived from these questions. Refer to Appendix 4. The preamble to this question, printed in bold, indicates that the client is asked to state whether they have experienced the following as "significant" problems. It is important to make it clear to the client that in the context of this question, a "significant problem" is defined as one that persists for two or more weeks in the past 3 months, keeps coming back, prevents the person from meeting their responsibilities or makes them feel as if they cannot go on.

Many of the sub-items in this question contain lists of feelings or instances where the client is asked whether they have experienced these as significant problems. For example, 27.(a) "Feeling very trapped, lonely, sad, blue, depressed or hopeless about the future" A "YES" answer should be given if the client has experienced any one of these as a "significant problem".

### 3.7 Section D. Social Functioning

A 6-item social functioning scale was adapted from the 15-item social functioning scale from the Opiate Treatment Index (Darke *et al.*, 1992).

Measures of personal and social well-being have been shown to be reliable predictors of treatment outcome and have been identified as an important component of multi-dimensional instruments that measure treatment outcomes for drug and alcohol clients (eds. Ward *et al.*, 1998). The types of relationships, responsibilities and support within a person's living situation are significant to their well-being and may influence the outcome of their treatment. These factors may be relevant when deciding between different treatment and support options for the client.

The questions in this section are designed to measure the client's levels of financial hardship; conflict in relationships with spouses/partners, other relatives and employers/school staff and students; time spent living with a drug user and time spent with non-drug using friends; arrests as a measure of criminal activity and involvement with child protection services over the past 3 months

The Social Functioning Scale (SFS) score, derived from items 28 – 33, is designed as a quick referential measure of the client's social functioning. Refer to Appendix 4 for scoring details.

*Item 28. How often in the last 3 months have you had any money problems, including arguing about money or not having enough for food or housing?*

In addition to what is stated in the question, "Money problems" may include a considerable degree of concern or time spent worrying about lack of sufficient funds.

*Item 29. How often in the last 3 months have you had conflict with your partner/spouse? By conflict, I mean verbal abuse, serious argument or violence, not a routine difference of opinion.*

This question contains a "not applicable" response, coded "8". It may be useful to preface this question with the following statement, "Have you been in a relationship or had significant contact with an ex-spouse or partner over the last 3 months?". If the answer is "no" then the "not applicable response should be ticked.

*Item 30. How often in the last 3 months have you had conflict with your relatives?*

This question contains a "no contact with relatives" response, coded "8". It may be useful to preface this question with the following statement, "Have you had any contact with your

relatives over the last 3 months?” It may be worth reiterating the meaning of conflict, as described in question 30.

*Item 31. How often in the last 3 months have you had conflict with your employer/school?*  
This question contains a “not employed/not at school” response, coded “8”. It may be useful to preface this question with the following statement, “Have you done any paid or volunteer work or study over the last 3 months?” It may be worth reiterating the meaning of conflict, as described in question 30.

*Item 32. How much of the time over the last 3 months have you lived with anyone who uses heroin or other illicit opioids?*  
This includes both sexual partners and housemates who have used illicit opioids, including diverted methadone in the last 3 months.

*Item 33. How much of the time over the last 3 months have you spent with friends who don't use heroin or other illicit opioids?*  
“Friends who don’t use heroin or other illicit opioids”, may include ex-users.

*Item 34. Arrests relating to offences allegedly committed in the past 3 months.*  
In part (a) the client is asked to state the numbers of times that they were arrested over the past 3 months. In order to assess instances of criminal behaviour during treatment, in part (b) the client is asked to state how many of these arrests, [in part (a)], relate to offences committed in this period.

Whilst the number of arrests may underestimate the extent of a client’s criminal behaviour it is more likely clients will give an honest response as arrests are a matter of public record. This item is an important outcome measure, since crime may be instrumentally linked to the funding of drug use (Hough, 1996) and a reduction in criminal behaviour is an important societal benefit from treatment (Anglin & Speckart, 1998).

*Item 35. Involvement with Child Protect Services (or equivalent authority having jurisdictional responsibility) and removal or restoration of child to care.*  
Restoration or removal of child from the care of a client may provide an assessment of general social functioning and may reflect additional treatment needs for the client.

### **3.8 Section E. Treatment specific sections for detoxification, rehabilitation and counselling**

#### **3.8.1 Detoxification**

*Item 36 Have you experienced a complicated withdrawal, requiring medical intervention , previous to this treatment?*

Factors that impinge upon treatment outcome such as previous experience of complicated withdrawal need to be investigated if informative comparisons are to be made between clients. A “complicated withdrawal” is experienced if the client requires medical attention in addition to that normally administered in the course of the withdrawal episode.

*Item 37 Were medications used to assist the client with withdrawal management? If yes, please specify medication(s) (to be completed by clinician at cessation of treatment)*

To distinguish between medicated and non-medicated withdrawal. If clients did receive medication to assist withdrawal, this question also gathers information on the types of medications administered.

*Item 38 How would you rate the severity of withdrawal symptoms you experienced on this occasion? (administered to the client at cessation of treatment)*

The severity of the client’s withdrawal symptoms is likely to be a significant factor affecting treatment outcome for this and future treatment episodes.

*Item 39 How well did staff prepare you for what you would experience during withdrawal? (administered to the client at cessation of treatment)*

Clients who perceive themselves to be well prepared by staff for what they are likely to experience from withdrawal exhibit better treatment outcome (Green & Gossop, 1988 cited in Mattick & Hall, 1996).

*Item 40 To what extent were you satisfied with the treatment you received? (administered to the client at cessation of treatment)*

This item seeks to investigate the relationship between client satisfaction with treatment and treatment outcome. Questions of this nature, as with the previous two items, should ideally be asked by someone who has not directly been involved with the client’s treatment, so as to avoid any bias that may arise from the client’s desire not to displease the staff member or prejudice their future relationship with the treatment service.

### **3.8.2 Rehabilitation**

*Item 41            How many times have you ever been in residential rehabilitation? (to be completed at commencement of treatment)*

This item seeks to investigate the relationship between number of similar treatment episodes and treatment outcome. Treatment history can provide an indicator of the severity of the client's alcohol or drug problem and assist with treatment placement decisions.

*Item 42            On average, how many formal counselling sessions, of 30 minutes or over, has the client attended per week? (To be completed by clinician at cessation of treatment).*

*Item 43            On average, how many (therapeutic) group sessions has the client attended per week? (To be completed by clinician at cessation of treatment).*

*Item 44            On average, how many self-help groups has the client attended per week? (To be completed by clinician at cessation of treatment).*

#### **Summary explanation of questions 42-44**

Items 42 – 44 are administrative as well as predictor treatment variables. In the case of the latter they seek to determine the effect of therapeutic focus on patient outcomes for different kinds of patients.

*Item 45            To what extent are you satisfied with the treatment service you received? (asked of client at cessation of treatment or three month review)*

This item seeks to investigate the relationship between client satisfaction with treatment and treatment outcome. Questions of this nature, as with the previous two items, should ideally be asked by someone who has not directly been involved with the client's treatment, so as to avoid any bias that may arise from the client's desire not to displease the staff member or prejudice their future relationship with the treatment service.

### **3.8.3 Counselling**

*Item 46 What led you to enter treatment on this occasion? (you may tick more than one box)*

Clients enter counselling for many reasons ranging from health concerns to mandatory court orders. This item seeks enable comparisons of treatment outcomes between clients based upon their main motivations for seeking treatment.

*Item 47 What is the main goal you wish to achieve through your involvement with this program? (tick only one box)*

This question specifically relates to clients goals around drug use (eg. stopping use of drug of concern or controlling use). The answer to this question may affect therapeutic focus and its relationship to treatment outcome can be investigated.

*Item 48 What other services have you accessed in the last 3 months? (you may tick more than one box)*

The intent of this item is to reveal pathways into treatment and their relationship to treatment outcome.

*Item 49 The principal type of service provided to this client was...(completed by clinician at cessation of treatment)*

The term “counselling” may refer to a range of different interventions from “assessment and referral” to long term family and individual counselling. It is important when comparing treatment outcomes between groups of clients to ascertain the nature of the treatment.

*Item 50 What was the main model of counselling used? (completed by clinician at cessation of treatment)*

This item seeks to determine the effect of therapeutic focus on patient outcomes for different kinds of patients.

*Items 51 – 53 Client’s feelings about completion of treatment goal, satisfaction with treatment received and treatment relationship (asked of client at follow-up interviews)*

These items seek to investigate the relationship between client satisfaction with treatment and treatment outcome. Questions of this nature should ideally be asked by someone who has not directly been involved with the client’s treatment, so as to avoid any bias that may arise from the client’s desire not to displease the staff member or prejudice their future relationship with the treatment service.



### **3.9 Section F & G. Commencement and Cessation of Treatment**

This section contains NSW MDS demographic items which are required for analysing patterns of service utilisation. See “2002 – 2003 NSW Minimum Dataset for Alcohol and Other Drug Treatment Services: Data Dictionary and Collection Guidelines.” (NSW Health Department, 2002) for a detailed guide on how to answer these questions.

## **4.0 Psychometric Properties of the BTOM**

In all of the studies described in this chapter, informed written consent was sought from eligible clients who were informed that their responses would remain strictly confidential and that the researchers conducting the interviews were independent their treatment facility. Participants were reimbursed up to \$30 for travel expenses on the completion of two interviews. Ethics approval for the study was obtained from the Human Research Ethics Committee, University of New South Wales.

### **4.1 Amphetamines**

#### **4.1.1 Protocol for amphetamine psychometric study**

In order to examine the test-retest and inter-rater reliability and the collateral validity of the BTOM for a client population with problematic amphetamine use, 50 interview pairs were conducted with clients recruited from five clinics from the South Eastern Sydney Area Health Service (two non-government residential rehabilitation, one non-government counselling, one government detoxification and one government methadone clinic) as well as by local “street press” advertising. Participants recruited via “street press” advertising were included in the study if they had used amphetamines for at least two days a week in the previous 3 months. Clients who had been in residential rehabilitation treatment for more than 2 weeks, were less than 18 years of age or not fluent in the English language were excluded from the study.

Each client was administered the questionnaire on two occasions (each with a different interviewer), three to seven days apart. On the second occasion, the subject was also administered subscales from the Opioid Treatment Index (OTI) (Darke *et al.*, 1992), 12-item Short-Form Health Survey (SF-12) (Ware *et al.*, 1996) and the Blood Borne Virus Transmission Risk Assessment Questionnaire (BBV-TRAQ) (Fry *et al.*, 1998).

#### **4.1.2 Participant characteristics**

The mean age of the test-retest participants was 30.1 years (SD 7.36, range 20-47 years) and 62% were male. The mean retest interval was 3.3 (SD 0.86 days, range 3-7 days). The mean interview time was 12.6 minutes (SD 5.0, range 6-23 minutes). In the last three months 68% of participants had injected a drug. See Table 1.2 in Appendix 2 for a summary of participant drug use.

## 4.2 Test-retest reliability for amphetamine study

**Table 4.1** Test-retest Intra-class Correlation Coefficient (ICC) reliability estimates for BTOM scale scores

<b>Scale or Item*</b>	<b>Different Interviewer ICC (95% CI) [N=50]</b>
Severity of Dependence Scale	0.82 (0.71 – 0.90)
Blood Borne Virus Exposure Risk	0.85 (0.70 – 0.91)
Polydrug Use	0.80 (0.68 – 0.88)
Health*	0.76 (0.62 – 0.86)
Psychological Functioning	0.82 (0.70 – 0.89)
Social Functioning	0.54 (0.29 – 0.71)
No. of Arrests*	0.72 (0.55 – 0.83)

The test-retest reliability of the BTOM was assessed calculating intra-class correlation coefficients on the total scores of the BTOM scales obtained at the first and second interviews. The results of these analyses are presented in Table 4.1. All were statistically significant at  $p < 0.01$  level (2 tailed). It is generally accepted that an ICC above 0.75 indicates excellent reliability; 0.65 – 0.74 good reliability; 0.40 – 0.64 fair reliability and below 0.40 poor reliability (Fleiss, 1991). With the exception of the social functioning ICC (a fair level at 0.54), all the ICC's for the BTOM scale scores are either excellent or good.

The ICC (95% CI) for total Occasions of Drug Use Scores (ODUS) for amphetamines use in the last 30 days was 0.80 (0.67 – 0.89),  $p < 0.01$  level (2 tailed).

### 4.3 Collateral Validity of BTOM Scales for amphetamine study

**Table 4.2 Correlations of BTOM scale scores with analogous scale scores**

<b>Scale or Item</b>	<b>Correlation</b>	<b>N</b>
BTOM BBVER vs BBV TRAQ	0.77	46
BTOM Polydrug vs Poly OTI	0.89	39
BTOM Psychological Functioning Scale vs SF-12 MCS	0.47	44
BTOM Social Functioning Scale vs Social OTI	0.39	42
BTOM Health vs SF-12 PCS	0.58	44
BTOM opioids ODUS* vs OTI heroin	0.79	42
BTOM alcohol ODUS vs OTI alcohol	0.84	39
BTOM cannabis ODUS vs OTI cannabis	0.95	42
BTOM cocaine ODUS vs OTI cocaine	0.69	42
BTOM amphetamines ODUS vs OTI amphetamines	0.68	42
BTOM tranquilisers ODUS vs OTI tranquilisers	0.94	37
BTOM tobacco ODUS vs OTI tobacco	0.95	42

\* Includes heroin, non-prescribed methadone and other illicitly obtained opioids

Pearson product-moment or Spearman's Rho correlation coefficients were calculated between BTOM scale scores and relevant scales from the Opioid Treatment Index (OTI), 12-item Short-Form Health Survey (SF-12) and the Blood Borne Virus Transmission Risk Assessment Questionnaire (BBV-TRAQ). Results are presented in Table 4.2. All correlations are statistically significant,  $p < 0.05$ .

## **4.4 Alcohol**

### **4.4.1 Protocol for alcohol psychometric study**

In order to examine the inter-rater reliability and the collateral validity of the BTOM for a client population receiving treatment for problematic alcohol use, 51 clients were recruited from four clinics from the South Eastern Sydney Area Health Service region (three non-government residential rehabilitation clinics and one government detoxification unit). Clients who were less than 18 years of age, not fluent in the English language or had been in residential rehabilitation treatment for more than 2 weeks were excluded from the study.

Each client was administered the questionnaire on two occasions (each with a different interviewer), three to seven days apart. On the second occasion, the subject was also administered subscales from the Opioid Treatment Index (OTI) (Darke *et al.*, 1992), 12-item Short-Form Health Survey (SF-12) (Ware *et al.*, 1996) and the Blood Borne Virus Transmission Risk Assessment Questionnaire (BBV-TRAQ) (Fry *et al.*, 1998).

### **4.4.2 Participant characteristics**

The mean age of the test-retest participants was 40.4 years (SD 8.82, range 19-56 years) and 84% were male. The mean retest interval was 3.4 days (SD 0.98 days, range 3-7 days). The mean interview time was 13.1 minutes (SD 7.79, range 5-35 minutes). In the last three months 19% of participants had injected a drug. See Table 1.2 in Appendix 2 for a summary of participant drug use.

## 4.5 Test-retest reliability for alcohol study

**Table 4.3** Test-retest Intra-class Correlation Coefficient (ICC) reliability estimates for BTOM scale scores

<b>Scale or Item*</b>	<b>Different Interviewer ICC (95% CI) [N=5]</b>
Severity of Dependence Scale	0.65 (0.46 – 0.78)
Blood Borne Virus Exposure Risk	0.79 (0.66 – 0.87)
Polydrug Use	0.87 (0.78 – 0.92)
Health* Psychological Functioning	0.69 (0.52 – 0.81)
	0.76 (0.61 – 0.85)
Social Functioning	0.80 (0.65 – 0.89)
No. of Arrests*	0.95 (0.91 – 0.97)

The test-retest reliability of the BTOM was assessed calculating intra-class correlation coefficients on the total scores of the BTOM scales obtained at the first and second interviews. The results of these analyses are presented in Table 4.3. All were statistically significant at  $p < 0.01$  level (2 tailed). It is generally accepted that an ICC above 0.75 indicates excellent reliability; 0.65 – 0.74 good reliability; 0.40 – 0.64 fair reliability and below 0.40 poor reliability (Fleiss, 1991). All of the ICC's for the BTOM scale scores with this class of drug are either excellent or good.

The ICC (95% CI) for total Occasions of Drug Use Scores (ODUS) for alcohol use in the last 30 days was 0.71 (0.52 – 0.83),  $p < 0.01$  level (2 tailed).

## 4.6 Collateral Validity of BTOM Scales for alcohol study

**Table 4.4** Correlations of BTOM and analogous scales from other instruments

<b>Scale or Item</b>	<b>Correlation</b>	<b>N</b>
BTOM BBVER vs BBV TRAQ	0.67	45
BTOM Polydrug vs Poly OTI	0.69	37
BTOM Psychological Functioning Scale vs SF-12 MCS	0.41	39
BTOM Social Functioning Scale vs Social OTI	0.56	37
BTOM Health vs SF-12 PCS	0.67	39
BTOM opioids ODUS* vs OTI heroin	0.83	38
BTOM alcohol ODUS vs OTI alcohol	0.59	31
BTOM cannabis ODUS vs OTI cannabis	0.91	39
BTOM cocaine ODUS vs OTI cocaine	0.85	39
BTOM amphetamines ODUS vs OTI amphetamines	0.77	38
BTOM tranquilisers ODUS vs OTI tranquilisers	0.87	31
BTOM tobacco ODUS vs OTI tobacco	0.78	40

\* Includes heroin, non-prescribed methadone and other illicitly obtained opioids

Pearson product-moment or Spearman's Rho correlation coefficients (r) were calculated between BTOM scale scores and relevant scales from the Opioid Treatment Index (OTI), 12-item Short-Form Health Survey (SF-12) and the Blood Borne Virus Transmission Risk Assessment Questionnaire (BBV-TRAQ). Results are presented in Table 4.4. All correlations are statistically significant,  $P < 0.05$ .

## **4.7 Cannabis**

### **4.7.1 Protocol for cannabis psychometric study**

In order to examine the inter-rater reliability of the BTOM for use with persons with problematic cannabis use, 52 participants were recruited from two Sydney universities, a methadone clinic, a detoxification unit and by advertisements placed in the local “street press”. Potential participants who had used cannabis at least once in the past 3 months and met the DSM IV criteria for current cannabis dependence, as determined from the Composite International Diagnostic Instrument (CIDI, World Health Organisation, 1993) were eligible to participate in the study. Clients were not eligible to participate if they were less than 18 years of age or not fluent in the English language.

Each client was administered the questionnaire on two occasions by the same interviewer.

### **4.7.2 Participant characteristics**

The mean age of the test-retest participants was 27.3 years (SD 7.65, range 18-49 years) and 60% were male. The interval between interviews was 5-14 days with a mean of 7.3 days (SD, 2.73 range 5-14 days). The mean interview time was 11.5 minutes (SD 3.76, range 5-20 minutes). In the last three months 29% of participants had injected a drug. See Table 1.2 in Appendix 2 for a summary of participant drug use.



## 4.8 Test-retest reliability for cannabis study

**Table 4.5** Test-retest Intra-class Correlation Coefficient (ICC) reliability estimates for BTOM scale scores

Scale or Item*	Same interviewer ICC (95% CI) [N=52]
Severity of Dependence Scale	0.70 (0.52 – 0.82)
Blood Borne Virus Exposure Risk	0.52 (0.29 – 0.70)
Polydrug Use	0.88 (0.81 – 0.93)
Health* Psychological Functioning	0.73 (0.57 – 0.84)
	0.83 (0.72 – 0.90)
Social Functioning	0.69 (0.50 – 0.81)
No. of Arrests*	0.95 (0.91 – 0.97)

The test-retest reliability of the BTOM was assessed calculating intra-class correlation coefficients on the total scores of the BTOM scales obtained at the first and second interviews. The results of these analyses are presented in Table 4.5. All were statistically significant at  $p < 0.01$  level (2 tailed). It is generally accepted that an ICC above 0.75 indicates excellent reliability; 0.65 – 0.74 good reliability; 0.40 – 0.64 fair reliability and below 0.40 poor reliability (Fleiss, 1991). All of the ICC's for the BTOM scale scores for this drug class are either excellent or good with the exception of blood born virus exposure risk that was fair.

The ICC (95% CI) for total Occasions of Drug Use Scores (ODUS) for cannabis use in the last 30 days was 0.81 (0.68 – 0.89),  $p < 0.01$  level (2 tailed).

## 4.9 Reliability estimates for reported drug use for amphetamine, alcohol & cannabis study participants

Given that participant's reported use of some drug types in each individual trial (amphetamines, alcohol & cannabis) was too low to calculate meaningful intra-class correlation coefficients and Kappa coefficients, the retest-reliability of the Occasions of

Drug Use Scale (ODUS) in the last 30 days was examined by combining data from the 3 trials. See Table 1.2 in Appendix 2 for reported drug use amongst participants from the 3 separate trials.

**Table 4.6 Test-retest Intra-class Correlation Coefficients (ICC) & Kappa coefficients ( $\kappa$ ) reliability estimates for occasions of drug use for each drug class**

<b>Occasions of Drug Use in the last 30 Days</b>	<b>N</b>	<b>ICC (95% CI)</b>	<b>Agreement between reported use and non-use (<math>\kappa</math>) N = 153</b>
Alcohol	117	0.81 (0.74 – 0.87)	0.78
Opioids	31	0.92 (0.83 – 0.96)	0.85
Cannabis	100	0.89 (0.84 – 0.92)	0.88
Cocaine	25	0.88 (0.74 – 0.94)	0.89
Amphetamines	70	0.81 (0.71 – 0.88)	0.80
Tranquilisers	35	0.90 (0.82 – 0.95)	0.67
Nicotine	128	0.91 (0.87 – 0.93)	0.84

\* ICC's were only calculated where use of the drug category had been reported in both interviews

Intra-class correlation coefficients were calculated on the total Occasions of Drug Use Scores (ODUS) obtained at the initial and retest interviews. The results of these analyses are presented in Table 4.6. Test-retest reliability with all drug classes was excellent,  $p < 0.01$  level (2 tailed). ICC's are shown for those clients reporting use of each substance in the preceding month. Cohen's kappa ( $\kappa$ ) coefficients were calculated to assess agreement between reported use and non-use from the first to the second interview for each substance and are presented in Table 4.6. Kappa values of less than 0.40 are considered poor agreement; values between 0.40 and 0.60 as fair agreement; values between 0.61 and 0.75, good agreement and values above 0.75 as excellent agreement (Landis & Koch, 1997).

## **5.0 BTOM Clinical Trial**

### **5.1 Study Protocol**

A 12-month clinical trial of the BTOM was conducted at 25 agencies (13 counselling, 4 rehabilitation and 8 detoxification) across NSW. Clients commencing treatment were invited to participate in the study. Those that had been receiving the same form of treatment less than one month prior to commencement of treatment were excluded. Informed written consent was sought from eligible clients. Ethics approval for the study was obtained from the NSW Department of Health Ethics Committee.

Clients were administered the BTOM at commencement of treatment and at 3 months following commencement of treatment. The first (“baseline”) interview was conducted as a face-to-face interview by a member of staff at the participating agency. Of the 25 participating agencies, research staff followed up clients from 8 agencies and did partial follow up for one agency.

Follow-up interviews were conducted with inpatients (as in the case of long-term rehabilitation), outpatients (as in the case with community detoxification and counselling services), and clients who had ceased treatment. At the first interview, contact details of the client and two persons known to the client were obtained to assist follow-up. These details were either kept by the agency or forwarded to the research staff for use in follow-up. When research staff conducted follow-up interviews, the number of calls, the time and date of each call and comments from either the client or other persons were recorded.

The principle aim of the BTOM clinical trial in rehabilitation, detoxification and counselling services was to assess the feasibility of incorporating the BTOM into routine clinical practice and to identify business practices that may facilitate this objective. It was important, therefore for the research staff to conduct the follow-up interviews in a manner that would be consistent with the methods and level of effort that could reasonably be expected from AOD agency staff. This was done to indicate rates and methods of client follow-up that could be achieved in routine clinical settings.

### **5.2 Characteristics of the clinical trial participants**

Tables 1.1 in Appendix 1 provide a summary of the baseline demographic characteristics of clients participating in the study from detoxification, rehabilitation and counselling services.

### **5.2.1 Detoxification**

Over the 12-month clinical trial, 263 clients were recruited from detoxification clinics across metropolitan and rural NSW. The mean age of participants at commencement of treatment was 32.7 years (SD 9.9 years, range 17 – 61 years) and 70.4% were male.

Client contact details collected by agency staff and posted to the researchers were received for 235 of the clients. Research staff were able to conduct follow-up interviews with 112 clients (48%).

### **5.2.2 Counselling**

Over the 12-month clinical trial, 202 clients were recruited from counselling agencies across metropolitan and rural NSW. The mean age of participants at commencement of treatment was 32.3 years (SD 10.2, range 17 – 67 years) and 58.4% were female.

The overall follow up rate for counseling was 30%. Of the 13 counselling agencies involved in the trial, the research followed up clients for only one of these agencies, achieving a follow up rate of 73%.

### **5.2.3 Rehabilitation**

Over the 12 month clinical trial, 133 clients were recruited from rehabilitation agencies across metropolitan and rural NSW. The mean age of participants at commencement of treatment was 31.6 years (SD 9.4, range 19 – 60 years) and 87.2% were male.

The overall follow up rate for rehabilitation was 23%. The research staff conducted follow up interviews for only one agency, achieving a follow-up rate of 21% and partial follow up for another agency where the follow-up rate was 36%.

### **5.2.4 Adolescent rehabilitation**

An adolescent rehabilitation service incorporated the BTOM into their client substance use assessment forms. This was administered to clients when entering treatment and three months after ceasing treatment. During the course of the trial, 107 clients were administered the BTOM at baseline and 47% of these clients were followed up three months after the cessation of treatment. Of this sample 57% were male (see Appendix 1. for complete demographic description).

Clients from the adolescent agency were followed up 3 months post treatment. Conversely, in the adult study most clients were reviewed as inpatients which is not ideal given that the BTOM was designed to be administered to an outpatient client population. The follow-up methodology employed by this study is hence more robust than that utilized in the adult rehabilitation study because sections of the BTOM pertaining to drug use, injecting behaviour, criminal activity and social functioning are often not relevant to clients in an inpatient setting.

### 5.3 BTOM Scale Scores of the Clinical Trial Participants

**Table 5.1 Differences in mean BTOM scale scores for detoxification clients**

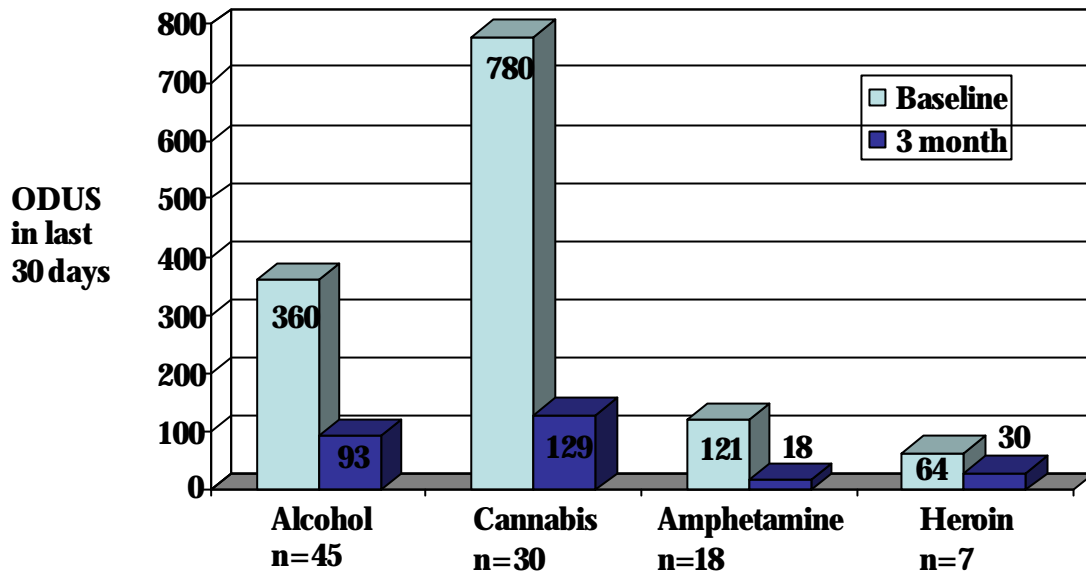
<b>BTOM Scale or Item*</b> <b>(maximum possible total)</b>	<b>Sample size</b> <b>(n)</b>	<b>Baseline – 3 Month Score Mean (SD)</b>	
		<b>Baseline</b>	<b>3 month</b>
<b>SDS (15)</b>	112	9.8 (2.71)	5.9 (4.68)
<b>BBVE risk (7)</b>	106	0.7 (1.65)	0.5 (1.42)
<b>Polydrug use (7)</b>	112	2.8 (1.15)	2.2 (1.21)
<b>Health* (5)</b>	111	3.7 (1.01)	2.9 (1.15)
<b>Psychological Functioning (8)</b>	111	5.0 (2.17)	3.0 (2.43)
<b>Social functioning (18)</b>	107	7.4 (3.79)	4.6 (3.96)
<b>No. of arrests in last 3 months*</b>	112	0.3 (1.05)	0.2 (0.74)

**Table 5.2 Differences in Occasions of Drug Use Scores for detoxification clients**

<b>Occasions of Drug Use</b> <b>in Last 30 Days</b>	<b>Sample size</b> <b>(n)</b>	<b>Baseline – 3 month ODUS Mean (SD)</b>	
		<b>Baseline</b>	<b>3 month</b>
<b>Opioids</b>	112	4.7 (19.26)	5.9 (25.01)
<b>Alcohol</b>	109	198 (251.24)	51 (89.37)
<b>Cannabis</b>	111	298 (464.54)	72 (179.20)
<b>Cocaine</b>	112	0.2 (1.16)	0.02 (0.13)
<b>Amphetamine</b>	108	41 (178.89)	3.7 (13.45)
<b>Tranquilisers</b>	109	9.8 (42.20)	3.4 (19.26)
<b>Tobacco</b>	112	514 (388.04)	470 (340.51)

Detoxification clients reviewed at 3 months from commencement of treatment (baseline) have shown statistically significant improvements in Severity of Dependence, ( $p < 0.001$ ); number of classes of drugs taken, ( $p < 0.001$ ); perception of health, ( $p < 0.001$ ); psychological functioning, ( $p < 0.001$ ); social functioning ( $p < 0.001$ ) and reductions in alcohol use, ( $p < 0.001$ ); cannabis use, ( $p < 0.001$ ) and amphetamine use, ( $p < 0.001$ ). Please see Table 5.1 and Table 5.2 for a complete summary.

**Figure 5.1 Occasions of Drug Use (ODUS) by Primary Drug of Concern for detoxification clients**



Clients were asked in the baseline BTOM to indicate which drug had led them to seek treatment (“primary drug of concern”). Clients who indicated at commencement of treatment that their primary drug of concern was either alcohol, cannabis or amphetamine reported significant reduction in the use of this drug at the 3 month follow-up. See Figure 5.1.

**Table 5.3 Differences in mean BTOM scale scores for counselling clients**

<b>BTOM Scale or Item* (maximum possible total)</b>	<b>Sample size (n)</b>	<b>Baseline – 3 Month Score Mean (SD)</b>	
		<b>Baseline</b>	<b>3 month</b>
<b>SDS (15)</b>	48	9.1 (3.68)	7.0 (3.75)
<b>BBVE risk (7)</b>	54	0.5 (1.28)	0.4 (1.31)
<b>Polydrug use (7)</b>	58	2.8 (1.25)	2.3 (1.23)
<b>Health* (5)</b>	55	3.6 (1.14)	3.0 (1.09)
<b>Psychological Functioning (8)</b>	56	4.6 (2.20)	3.1 (2.23)
<b>Social functioning (18)</b>	56	7.6 (4.44)	5.2 (3.98)
<b>No. of arrests in last 3 months*</b>	58	0.1 (0.38)	0.1 (0.34)

**Table 5.4 Differences in Occasions of Drug Use Scores for counselling clients**

<b>Occasions of Drug Use in Last 30 Days</b>	<b>Sample size (n)</b>	<b>Baseline – 3 month ODUS Mean (SD)</b>	
		<b>Baseline</b>	<b>3 month</b>
<b>Opioids</b>	57	7 (31.67)	1 (4.81)
<b>Alcohol</b>	55	57 (109.70)	40 (133.71)
<b>Cannabis</b>	56	95 (205.15)	106 (252.71)
<b>Cocaine</b>	57	0.4 (3.18)	0.1 (0.53)
<b>Amphetamine</b>	56	6 (13.45)	4 (14.48)
<b>Tranquilisers</b>	57	12 (48.22)	8 (28.13)
<b>Tobacco</b>	55	495 (356.36)	450 (329.20)

Counselling clients reviewed at 3 months from commencement of treatment (baseline) have shown statistically significant improvements in Severity of Dependence, ( $p=0.003$ ); perception of health, ( $p<0.001$ ); psychological functioning, ( $p<0.001$ ); social functioning ( $p<0.001$ ) and a reduction in the number of classes of drugs taken, ( $p<0.001$ ). There were no statistically significant decreases in drug use between baseline and three month reviews.

**Table 5.5 Differences in mean BTOM scale scores for adult rehabilitation clients**

<b>BTOM Scale or Item* (maximum possible total)</b>	<b>Sample size (n)</b>	<b>Baseline – 3 Month Score Mean (SD)</b>	
		<b>Baseline</b>	<b>3 month</b>
<b>SDS (15)</b>	19	9.8 (3.39)	4.4 (3.99)
<b>BOBVE risk (7)</b>	30	1.8 (2.16)	0.4 (1.25)
<b>Polydrug use (7)</b>	30	2.8 (1.32)	1.8 (1.68)
<b>Health* (5)</b>	30	3.5 (1.01)	2.6 (0.89)
<b>Psychological Functioning (8)</b>	30	5.3 (2.14)	3.1 (2.37)
<b>Social functioning (18)</b>	29	8.6 (3.43)	3.7 (3.38)
<b>No. of arrests in last 3 months*</b>	30	0.4 (0.82)	0.1 (0.40)

**Table 5.6 Differences in Occasions of Drug Use Scores for adult rehabilitation clients**

<b>Occasions of Drug Use in Last 30 Days</b>	<b>Sample size (n)</b>	<b>Baseline – 3 month ODUS Mean (SD)</b>	
		<b>Baseline</b>	<b>3 month</b>
<b>Opioids</b>	26	26 (67.85)	38 (191.18)
<b>Alcohol</b>	30	57 (100.30)	32 (83.19)
<b>Cannabis</b>	30	138 (265.99)	27 (87.44)
<b>Cocaine</b>	30	1.6 (7.40)	0
<b>Amphetamine</b>	29	19 (49.33)	6.5 (24.30)
<b>Tranquilisers</b>	30	22 (62.84)	4.5 (19.44)
<b>Tobacco</b>	30	549 (351.46)	442 (440.60)

Rehabilitation clients reviewed at 3 months from commencement of treatment (baseline) have shown statistically significant improvements in Severity of Dependence, ( $p < 0.001$ ); blood borne virus risk exposure ( $p < 0.001$ ); perception of health, ( $p < 0.001$ ); psychological functioning, ( $p < 0.001$ ) and social functioning ( $p < 0.001$ ) and a reduction in the number of classes of drugs taken, ( $p < 0.01$ ) and cannabis use, ( $p = 0.015$ ).



**Table 5.7 Differences in mean BTOM scale scores for adolescent rehabilitation clients**

<b>BTOM Scale or Item* (maximum possible total)</b>	<b>Sample size Baseline – 3 Month Score Mean (SD)</b>		
	<b>(n)</b>	<b>Baseline</b>	<b>3 month</b>
<b>SDS (15)</b>	57	9.7 (3.08)	5.5 (4.17)
<b>B0BVE risk (7)</b>	56	1.1 (1.9)	0.7 (1.4)
<b>Polydrug use (7)</b>	57	NA	NA
<b>Health* (5)</b>	57	3.9 (0.95)	3.0 (1.1)
<b>Psychological Functioning (8)</b>	57	3.8 (1.69)	3.8 (2.34)
<b>Social functioning (18)</b>	55	8.4 (3.20)	5.9 (2.73)
<b>No. of arrests in last 3 months*</b>	57	1.4 (2.20)	0.1 (0.37)

**Table 5.8 Differences in Occasions of Drug Use Scores for adolescent rehabilitation clients**

<b>Occasions of Drug Use in Last 30 Days</b>	<b>Sample size Baseline – 3 month ODUS Mean (SD)</b>		
	<b>(n)</b>	<b>Baseline</b>	<b>3 month</b>
<b>Opioids</b>	53	16 (62.8)	1 (3.6)
<b>Alcohol</b>	60	119 (198.6)	52 (155.1)
<b>Cannabis</b>	55	431 (779.7)	66 (143.2)
<b>Cocaine</b>		NA	NA
<b>Amphetamine</b>	54	43 (140.4)	3 (16.3)
<b>Tranquilisers</b>	55	15 (49.5)	2 (12.3)
<b>Tobacco</b>	54	487 (349.3)	200 (218.3)

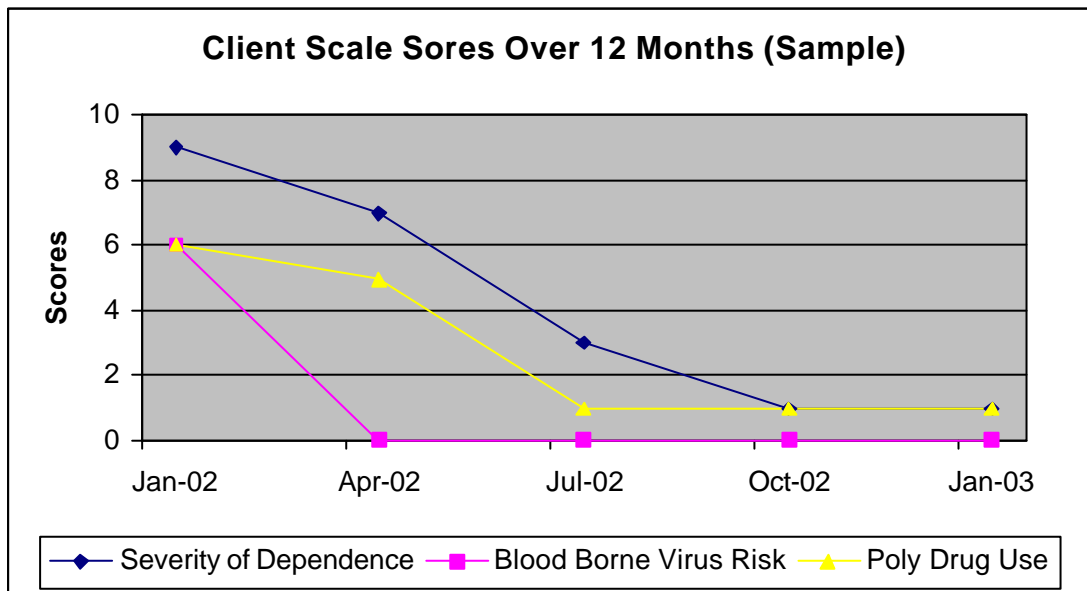
Adolescent rehabilitation clients reviewed at 3 months from commencement of treatment (baseline) have shown statistically significant improvements in Severity of Dependence, ( $p < 0.001$ ); perception of health, ( $p < 0.001$ ); psychological functioning, ( $p < 0.001$ ) and social functioning ( $p < 0.001$ ) and a significant reduction in alcohol, cannabis and amphetamine use.

## 5.4 Clinical Utility of the BTOM Scale Scores

It was anticipated that the BTOM would assist the clinician and client to “chart” the client’s progress during and after treatment. The content domains of the BTOM can act as a checklist of points to be covered. It is, therefore, a means of formalising the monitoring process and serves as a stimulus for deeper exploration of the client’s needs. In turn, clinicians are able to provide feedback and positive reinforcement to clients via the scoring system.

This process can be made more explicit by graphing the client’s progress as shown in Figure 5.1, below.

**Figure 5.1** Graphical representation of an individual client’s progress through treatment



## 6.0 Conducting follow-up with clients who have left treatment

### 6.1 Follow-up process information for detoxification

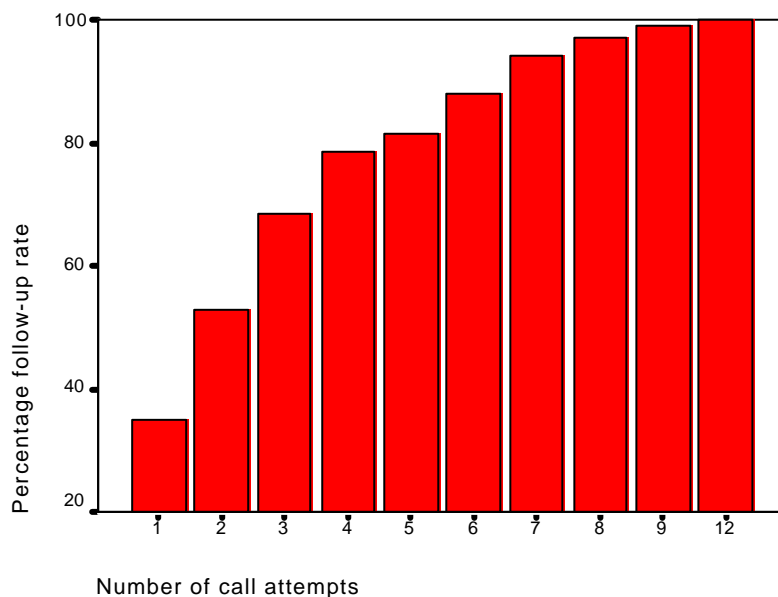
The primary aim of the clinical trial was to assess the feasibility of integrating the BTOM into routine clinical practice. In order to conduct outcome monitoring in treatment modalities where duration of treatment is often less than 3 months (the minimum period of time that can elapse between BTOM reviews) it will be necessary to contact clients who have left treatment.

When research staff conducted follow-up interviews, the number of phone calls taken to successfully follow-up clients; reasons that clients were not followed up; the differences between those clients that were followed up and those that were not; the time taken to conduct follow-up interviews; and whether interviews were conducted on a landline or mobile phone were recorded.

### 6.2 Number of phone calls for successful follow-up

NDARC research staff achieved a follow-up rate of 48%. Over 80% of all successful follow-ups occurred within 5 phone calls or less. See Figure 6.1. This demonstrates that relatively little effort need be expended by clinicians to achieve a follow-up rate of close to 50%.

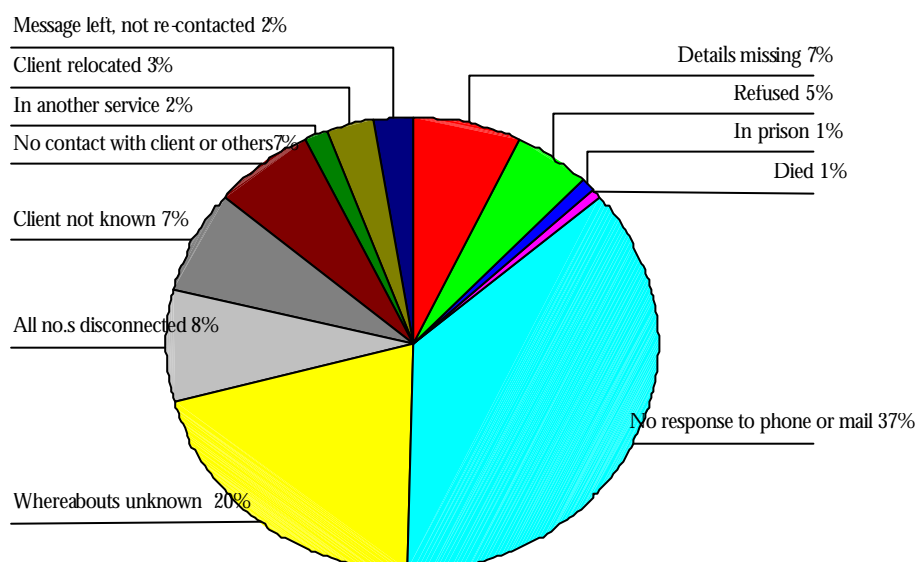
**Figure 6.1** Cumulative distribution of the number of phone calls needed to achieve client follow-up at 3 months



### 6.3 Reasons given for failure to follow-up

Of the 235 detoxification clients for which a contact detail form was received, 123 clients (52%) were unable to be contacted or refused a follow-up interview. NDARC research staff recorded the reasons for failure to follow-up clients. Comments from any persons spoken to were logged as were instances of disconnected numbers and missing details. Collation of this data provides insight into the reasons for failure to follow-up and is hopefully instructive to staff who are contemplating conducting outcome monitoring.

**Figure 6.2** Reported reasons for failure to follow-up clients



#### 6.3.1 Explanation of pie-graph categories

- **Message left, not re-contacted** - Interviewer's telephone number was left with client's contact(s) after all other avenues have been exhausted. Client did not call back.
- **Client relocated** - client's contacts stated that client was not contactable due to temporary relocation.
- **In another service** - client attending another service at time of follow-up. e.g., residential rehabilitation
- **No contact with client or others**- all numbers given in contact details were either not answered, engaged, or disconnected. No contact with client, or other(s) was made.
- **Client not known** - client's contact(s) allege no knowledge of client.
- **All numbers disconnected** - all numbers on follow-up form were disconnected.

- **Whereabouts unknown** – client's contacts uncertain of whereabouts.
- **Details missing** – follow-up form had no contact information.
- **No response to mail** – Survey was mailed out to client after all other means of contact had been exhausted. Client did not respond.

#### **6.4 Differences between clients followed-up and not followed-up**

A comparison of client characteristics at baseline between clients followed-up and not followed-up at 3 months was conducted to identify those baseline characteristics which predispose to failure to achieve follow-up. Constructing a profile of clients who are more difficult to follow-up may assist clinic staff in adopting a different follow-up approach with clients who possess these characteristics. It could also be argued that outcome data obtained from only a proportion of the clients who originally commenced treatment is going to be biased towards a more favourable overall outcome than that which would be achieved had all the clients had been follow-up. Clients more amenable to follow-up may be more likely to achieve better outcomes from treatment.

It was found that, at baseline, the follow-up and non follow-up groups did not significantly differ on age, gender, being of indigenous descent, being born in Australia, being in employment, or in what manner of dwelling they lived. Client's in the non follow-up group were more likely to identify heroin or another opiate as their main drug of concern ( $P = 0.038$ ) and were also more likely to have been arrested at least once for offences committed in the three months prior to the baseline interview ( $P = 0.014$ ). Clients in the non follow-up group were also more likely to have been mandated into treatment, not received pre-treatment planning and not be referred to another service. Refer to Table 6.2.

The BTOM scales were also used to examine differences between the follow-up and non follow-up groups. No significant differences were found in severity of dependence, blood borne virus exposure risk, health, psychological or social functioning. The non follow-up group exhibited higher opioid use in the 3 months prior to the commencement of treatment ( $P = 0.037$ ). The two groups did not significantly differ in ODUS scores for any of the other drugs. Higher levels of opiate use in the non follow-up group is consistent the observation that a higher proportion of this group identified heroin or another opiate as their main drug of concern (See Table 6.1 for a summary of these differences).

**Table 6.1 Baseline comparison of clients: followed up vs. not followed up**

<b>CLIENT CHARACTERISTICS</b>	<b>Followed-up (N=112)</b>	<b>Not followed up (N=123)</b>
<b>Age (years)</b>	34	32
	%	%
<b>Male</b>	64	74
<b>ATSI Descent</b>	5	7
<b>Born in Australia</b>	87	92
<b>In full-time/part-time employment</b>	18	19
<b>Living in rented/owned house or flat</b>	99	93
<b>Principle Drug of Concern</b>		
<b>Alcohol</b>	43	34
<b>Heroin and other opiates*</b>	8	17
<b>Cannabis</b>	28	25
<b>Benzodiazepines</b>	2	2
<b>Amphetamines</b>	18	21
<b>Injecting drug use</b>	25	37
<b>Arrested in the last 3 months*</b>	15	27

\* significant difference, p<0.05

**Table 6.2 Differences in client treatment characteristics: followed up vs. not followed up**

<b>TREATMENT VARIABLES (%)</b>	<b>Followed- up (N=112)</b>	<b>Not followed-up (N=123)</b>
<b>Treatment completed</b>	73	72
<b>Mandated to treatment*</b>	2	15
<b>Pre-treatment planning*</b>	49	35
<b>Post-treatment planning</b>	76	79
<b>Client received counselling</b>	61	56
<b>Client participated in group programs</b>	70	65
<b>Referred to another service*</b>	84	72

\* significant difference, p<0.05

## **6.5 Time taken to conduct 3-month review and contact method**

The mean time taken for NDARC research staff to conduct a three month follow-up BTOM interview in detoxification was 11.2 minutes (SD, 2.71). This contrasted with the mean completion time for the baseline interview of 24.3 minutes (SD, 9.85). The baseline interviews were conducted by staff members at the treatment services, usually as part of the overall client assessment process.

Eighty seven percent of three month review interviews were conducted with clients on a land line telephone and 13% were interviewed on a mobile telephone.

## **7.0 Clinician Assessment Survey for the BTOM**

### **7.1 Background**

To aid in evaluating the clinical trial of the BTOM in the three treatment types (counselling, rehabilitation and detoxification) and to provide a platform for feedback from clinicians using the instrument, a clinician survey was developed by staff at NDARC and the Drug Programs Bureau, NSW Health.

The managers of participating agencies distributed the questionnaires to their staff, organised their collection, and returned the questionnaires to the researchers. It was deemed important that every clinician who had administered the BTOM complete the survey. There were many clinicians that administered the BTOM during the course of the trial who subsequently left their agency. The researchers requested that agency managers attempt to contact these clinicians and request that they complete the survey if possible.

In January 2003 the BTOM Clinician Survey was sent out to all agencies that had been collecting the BTOM. The questionnaire consisted of 4 main sections:

1. Utility of the BTOM
2. Content of the BTOM
3. Administration and Support
4. Personal and Professional Details

In the first 3 sections respondents were asked to rate, on a likert scale, their agreement/disagreement with a series of statements. [1=strong disagreement; 2=moderate disagreement; 3=neither agree nor disagree; 4=moderate agreement and 5=strong agreement]. Respondents were then asked to write a response to a series of opened ended questions.

### **7.2 Results**

A total of 71 different clinicians were known to have administered at least one BTOM prior to January 2003. Twenty four completed questionnaires were returned to the researchers, yielding an overall response rate of 34%. No surveys were received from residential rehabilitation services. The mean age of the 24 respondents was 39 years (SD 9.7, range 24 - 52 years) and 91% were female. The respondents had worked an average of 5.6 years in the alcohol and other drug treatment field (SD 5.82, range 1 – 25 years). The respondent's qualification level is presented in Table 7.1. The median number range of BTOM's administered by respondents over the course of the trial was 10 – 19.



**Table 7.1      Qualification Level**

<b>Qualification</b>	<b>Number</b>
None	1
Certificate level	3
Diploma	1
Nursing (RN or degree)	7
Degree (social work/psychology)	7

Tables 7.2-7.4 present mean ratings for the clinician's perception of the utility and content of the BTOM, and the administrative burden and level of support associated with using the BTOM. All except for one of the mean ratings are between 3 (neither agree nor disagree) and 4 (moderate agreement) for the statements shown in the tables. This indicates that overall the respondents surveyed were neutral to somewhat positively predisposed towards using the BTOM.

**Table 7.2      Mean clinician ratings of the utility items**

<b>Item Description</b>	<b>N</b>	<b>Mean (SD)</b>
BTOM is a clinically useful instrument	23	3.7 (1.15)
BTOM is useful for assessing new clients	23	3.6 (1.12)
BTOM is useful for developing a treatment program	23	3.4 (1.04)
BTOM assists me to evaluate client progress	22	3.3 (1.13)
Following up clients with the BTOM is a useful means of re-engaging with the client	22	3.5 (1.19)
Following up 3 months after the commencement of treatment is an appropriate way to evaluate treatment outcomes	23	3.5 (0.10)
The feedback we have received on our data has demonstrated the utility of the BTOM for evaluating service delivery	22	3.6 (1.14)
<b>Utility Scale Mean</b>	<b>24</b>	<b>3.5 (0.88)</b>

**Table 7.3 Mean Clinician ratings on the content items**

<b>Item Description</b>	<b>N</b>	<b>Mean (SD)</b>
The questions are worded clearly and unambiguously	24	3.4 (1.22)
My clients find the questions acceptable	25	4.0 (0.84)
I find the questions acceptable	24	3.8 (1.07)
The changes measured by the BTOM are important indicators of the client's progress	25	3.7 (1.11)
Section A questions cover the core of what I need to know	24	3.8 (1.03)
Section B questions cover the core of what I need to know	25	3.8 (1.18)
Section C questions cover the core of what I need to know	25	3.8 (1.17)
Section D questions cover the core of what I need to know	25	3.7 (1.11)
Section E questions cover the core of what I need to know	25	3.5 (1.01)
Section F questions cover the core of what I need to know	24	3.5 (1.02)
Section G questions cover the core of what I need to know	24	3.7 (0.10)
<b>Content Scale Mean</b>	<b>25</b>	<b>3.7 (0.85)</b>

**Table 7.4 Mean clinician ratings on the administration and support items**

<b>Item Description</b>	<b>N</b>	<b>Mean (SD)</b>
The layout of the BTOM makes it easy to administer	25	3.3 (1.18)
BTOM takes on average 15 minutes to administer	24	3.5 (1.29)
I am able to integrate the use of the BTOM into routine clinical practice	23	3.1 (1.20)
I received sufficient training and support for administration of the BTOM	24	3.2 (1.27)
BTOM Admin & Procedures Manual is a useful document	24	3.5 (0.89)
I am sufficiently supported to conduct follow up interviews on clients who have left treatment	23	2.8 (1.11)
<b>Administration and Support Scale Mean</b>	<b>25</b>	<b>3.2 (0.71)</b>

### **7.3 Open Ended Questions: Summary of Responses**

Clinicians were asked to provide a written response to a series of opened ended questions. A summary of the more common responses is presented in descending order of frequency of occurrence.

“Comment on what you found most useful about the BTOM”

- *Drug use section, determining current drug taking*
- *The BTOM provides concrete evidence that service is making a difference*
- *The BTOM is useful for overall screening and allows for monitoring of client progress*
- *Gives clinician insight into client’s needs and opinions of themselves*
- *Engages client in treatment and provides openings for discussion*

“Comment on what you found least useful about the BTOM”

- *Duplication of data collection*
- *Time consuming*
- *Agency lacks resources to implement the BTOM*
- *Severity of dependence scale*
- *Follow ups are difficult with chaotic clients*
- *Questions don’t address client groups with specific needs (e.g., single mothers)*

“What are the main barriers to successful implementation”

- *Lack of time*
- *Organising an appointment time that is agreed upon by the both client and staff member*
- *Client non-compliance*
- *Staff lacking support and resources to conduct BTOM*

## **8.0 Summary**

The BTOM has been developed for routine on-going monitoring of treatment outcome over a range of AOD treatment delivery services and for treatment evaluation research. It consists of a standardised set of data items on client demographics and the utilisation of AOD services and a core set of outcome measures or scales. This report has described the reliability and validity of the outcome measures; the performance of the instrument in different clinical settings; the practicality of following-up clients who have left treatment and the views of clinic staff tasked with administering the questionnaire.

Overall, the BTOM has demonstrated good to excellent psychometric properties. The retest reliabilities for the BTOM scales, including drug use scores (ODUS) are good to excellent indicating their consistency with multiple measurements across time and different interviewers. Concurrent validation of BTOM scales with longer and/or more complex analogous scales from similar instruments yielded acceptable agreement. The reliability estimates for categorical data, for the most part good to excellent, were generally lower for different interviewers than for the same interviewers. This was also the case with the BTOM scales where different interviewer's retest results were characterized by lower retest coefficients and wider confidence intervals than that achieved by the same interviewers. These observed differences between the same and different interviewers on retest highlights the importance of comprehensive and consistent training of potential interviewers to maximise the reliability of responses.

The reliability of client self-completion of the BTOM was studied with OMP clients (Lawrinson, *et al*, 2003). Inter-rater reliability between trained interviewers and clients was poor. It is clear, therefore, that client self-completion of the BTOM should be strongly discouraged and the temptation in a busy clinic for staff to pass the questionnaire to the client for completion to be avoided.

The BTOM is intended to serve the need of policy makers and treatment evaluation researchers providing a comparable core dataset to facilitate increased awareness of, and improved responsiveness to, the sector's needs by the government, treatment and other health agencies, and the broader community. In order to achieve these aims it is imperative to standardise data collection methods across treatment settings, utilising an instrument with established, sound psychometric properties. It should also be recognised that the success of such a venture rests ultimately with the clinicians who are tasked with collecting the data. The information collected and the method of collection itself must be of immediate clinical utility, sited with routine clinical practice and supported at all levels of administration. Account must be made for the potential of high staff turnover, differing qualifications and

skill levels of clinicians and organisational differences across treatment settings. Accordingly key considerations in the design of the BTOM were that it place minimal time demands on clinical staff and clients, be acceptable, easy to administer, interpret and score.

Clinicians who had participated in the clinical trial completed a survey designed to elicit feedback on their experience of using the BTOM. Findings indicate that clinicians, in general, approve of the BTOM content and find the instrument to be clinically useful. One item in the survey, “I am sufficiently supported to conduct follow up interviews on clients who have left treatment” rated below the “neutral” response, indicating disagreement with this statement. Chapter 6 detailed the practicality of following-up clients who had left treatment. Conducting follow-up on clients, who have left treatment, particularly when the treatment is of a limited duration such as with counselling and withdrawal services, is unavoidable and absolutely necessary. It is strongly recommended, therefore, that careful prior consideration be given to the availability of resources with which to conduct outcome monitoring. If resources are insufficient to follow-up all clients, a proportion of clients, randomly selected so as to avoid bias, could be monitored. Additionally, if monitoring is intended to be on-going, it may be sufficient to allocate a limited period each year to monitoring activities rather than the whole year.

The BTOM was designed to be used with an outpatient client population. This may effect the interpretation of results for clients of residential rehabilitation services if the 3-month follow-up interview is conducted whilst they are still in residential treatment. As with any inpatient population, living conditions are very different to those experienced by clients living in the broader community. Additionally, many of these services are abstinence based, possibly exposing clients admitting to drug use to disciplinary measures or expulsion from the program. Hence, it is recommended that clients are followed-up post treatment as was done in the adolescent rehabilitation study (see Section 5.2.4).

The clinical trial conducted in counselling, rehabilitation and withdrawal services indicated that outcome scales of the BTOM are capable of measuring changes in client behaviour and self-perceptions. Clients in all three treatment types demonstrated significant improvements on follow-up in multiple domains of functioning, including, importantly, significant reductions in the use of the drug that had led them to seek treatment. It is clear from this preliminary data that the BTOM is suitable choice of instrument for demonstrating the utility of these AOD services as well as measuring client outcome.

## 9.0 References

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## **Appendices**

**Appendix 1 Characteristics of the BTOM trial study participants (at baseline)**

**Appendix 2 Drug classes used in the amphetamines, cannabis & alcohol psychometric trials**

**Appendix 3 The Brief Treatment Outcome Measure (BTOM)**

**Appendix 4 BTOM Scores Summary Sheet**

**Appendix 5 BTOM Follow-up Contact Form**

**Appendix 1: Characteristics of the detoxification,  
counselling and adult and adolescent  
rehabilitation clinical trial participants**

## Appendix 1

**Table 11 Descriptive statistics for rehabilitation, counselling and detoxification at baseline**

	<b>Adult Rehab. Baseline% (N=133)</b>	<b>Counselling Baseline% (N=202)</b>	<b>Detox Baseline% (N=263)</b>	<b>Adolescent Baseline% (N= 102)</b>
<b>Age</b>	31.63	32.3	32.74	16.74
<b>Gender</b>				
Male	87.2	41.6	70.4	57
<b>ATSI Descent</b>	7.0	6.6	5.74	10.1
<b>Born in Australia</b>	84	89.3	90.1	89.6
<b>In full-time/part-time employment</b>	9.4	18.8	19.5	2.9
<b>Living in house or flat</b>	74.2	73.6	95.0	78.8
<b>Living alone</b>	40.3	17.8	18.1	7.8
<b>Drug of greatest concern</b>				
Alcohol	35.4	38.8	38.6	12.4
Heroin and other opiates	21.5	18.0	13.5	25.7
Cannabis	12.3	21.9	24.7	35.2
Benzodiazepines	0.8	3.3	1.5	1
Amphetamines	25.4	16.4	19.3	21
<b>Injecting drug use</b>	48.4	28.8	31.9	26.3
<b>Other drug of concern</b>	76	48	53.0	80.4
<b>Used needle/syringe after someone else</b>	<b>22 (N=64)</b>	<b>14.8 (N=72)</b>	<b>21.7(N=120)</b>	<b>7.7 (N=91)</b>
<b>Overdosed in last 3 months</b>	22	12.7	21.7	-
<b>Arrested at least once for offences committed in the last 3 months</b>	25.9	13	12.8	43.7
<b>Involvement with child protection</b>	2.3	23.9	21.9	-

**Appendix 2: Participant drug use in the amphetamines, cannabis and alcohol reliability and validity studies**

## Appendix 2

<b>Drug classes</b>	<b>Amphetamine study</b>	<b>Cannabis Study</b>	<b>Alcohol Study</b>
<b>Alcohol (%)</b>	76	79	98
<b>Opiates (%)</b>	36	25	12
<b>Cannabis (%)</b>	74	96	40
<b>Cocaine (%)</b>	28	31	6
<b>Amphetamine (%)</b>	96	52	18
<b>Tranquilisers (%)</b>	37	25	29
<b>Tobacco (%)</b>	90	87	88

**Table 1.2** Participant drug use in the amphetamines, cannabis and alcohol reliability and validity studies

**Appendix 3: The Brief Treatment Outcome Measure (BTOM) questionnaire for clients in detoxification, counselling and/or rehabilitation treatment**

**NSW ALCOHOL & OTHER DRUG TREATMENT SERVICES  
BRIEF TREATMENT OUTCOME MEASURE (BTOM)**

**\*Required for NSW Minimum Data Set**

\*Agency code:  Agency Name: \_\_\_\_\_

\*Agency location:  Area Health Service: \_\_\_\_\_

Date of interview: // Interviewer: \_\_\_\_\_  
(Please print)

\*Client code:

**\*Date of commencement of treatment:** //

BASELINE INTERVIEW	<input type="checkbox"/>
3 MONTH FOLLOW-UP INTERVIEW <sup>‡</sup>	<input type="checkbox"/>
_ MONTH FOLLOW-UP INTERVIEW <sup>‡</sup>	<input type="checkbox"/>

<sup>‡</sup> Please ensure "Client Code" matches that used for "Baseline Interview"

Tick only one box for each question, unless otherwise stated

## Section A

The questions in this section provide us with some background information.

- \*1. Are you
- |                                   |                          |   |
|-----------------------------------|--------------------------|---|
| Male                              | <input type="checkbox"/> | 1 |
| Female                            | <input type="checkbox"/> | 2 |
| Not stated/inadequately described | <input type="checkbox"/> | 9 |

- \*2.(a) What is your date of birth? //

(b) **Interviewer to answer**

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

- |               |                          |   |
|---------------|--------------------------|---|
| Estimated     | <input type="checkbox"/> | 1 |
| Not estimated | <input type="checkbox"/> | 2 |

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

- |  |                          |   |
|--|--------------------------|---|
| Yes, Aboriginal                          | <input type="checkbox"/> | 1 |
| Yes, Torres Strait Islander              | <input type="checkbox"/> | 2 |
| Yes, Aboriginal & Torres Strait Islander | <input type="checkbox"/> | 3 |
| No                                       | <input type="checkbox"/> | 4 |
| Not stated                               | <input type="checkbox"/> | 9 |

- \*4. In what country were you born?

- |           |                          |      |
|-----------|--------------------------|------|
| Australia | <input type="checkbox"/> | 1101 |
| Other     | <input type="checkbox"/> |      |

If other, please specify

---

- \*5. What language do you prefer to speak?

- |         |                          |    |
|---------|--------------------------|----|
| English | <input type="checkbox"/> | 19 |
| Other   | <input type="checkbox"/> |    |

If other, please specify

---



\*6. What is your main source of income?

- |   |                          |    |
|---|--------------------------|----|
| Full-time employment                            | <input type="checkbox"/> | 01 |
| Part-time employment                            | <input type="checkbox"/> | 02 |
| Temporary benefit (e.g. sickness unemployment,) | <input type="checkbox"/> | 03 |
| pension (e.g. aged, disability)                 | <input type="checkbox"/> | 04 |
| Student allowance                               | <input type="checkbox"/> | 05 |
| Dependant on others                             | <input type="checkbox"/> | 06 |
| Retirement fund                                 | <input type="checkbox"/> | 07 |
| No income                                       | <input type="checkbox"/> | 08 |
| Other   | <input type="checkbox"/> | 98 |
| Not stated/not known/inadequately described     | <input type="checkbox"/> | 99 |

\*7. Who do you live with?

- |  |                          |    |
|--|--------------------------|----|
| Alone  | <input type="checkbox"/> | 01 |
| Spouse/partner                               | <input type="checkbox"/> | 02 |
| Alone with child(ren)                        | <input type="checkbox"/> | 03 |
| Spouse/partner and child(ren)                | <input type="checkbox"/> | 04 |
| Parent(s)                                    | <input type="checkbox"/> | 05 |
| Other relative(s)                            | <input type="checkbox"/> | 06 |
| Friend(s)                                    | <input type="checkbox"/> | 07 |
| Friend(s)/parent(s)/relative(s) and children | <input type="checkbox"/> | 08 |
| Other  | <input type="checkbox"/> | 98 |
| Not stated/not known/inadequately described  | <input type="checkbox"/> | 99 |

\*8. Do you usually live in a

- |  |                          |    |
|--|--------------------------|----|
| Rented house or flat (public or private) | <input type="checkbox"/> | 01 |
| Privately owned house or flat            | <input type="checkbox"/> | 02 |
| Boarding house                           | <input type="checkbox"/> | 03 |
| Hostel/supported accommodation services  | <input type="checkbox"/> | 04 |
| Psychiatric home/hospital                | <input type="checkbox"/> | 05 |
| Alcohol/other drug treatment residence   | <input type="checkbox"/> | 06 |
| Shelter/refuge                           | <input type="checkbox"/> | 07 |
| Prison/detention centre                  | <input type="checkbox"/> | 08 |
| Caravan on serviced site                 | <input type="checkbox"/> | 09 |
| No usual residence/homeless              | <input type="checkbox"/> | 10 |
| Other                                    | <input type="checkbox"/> | 98 |
| Not known                                | <input type="checkbox"/> | 99 |

## Section B

In this section you will be asked about your use of drugs and alcohol in the last 3 months, unless specified.

\*9. What drug has led you to seek treatment from this service?

Please specify \_\_\_\_\_

\*10. How do/did you usually take this drug?

- |                                   |                          |   |
|-----------------------------------|--------------------------|---|
| Ingest (eat, drink, swallow)      | <input type="checkbox"/> | 1 |
| Smoke                             | <input type="checkbox"/> | 2 |
| Inject                            | <input type="checkbox"/> | 3 |
| Sniff (powder)                    | <input type="checkbox"/> | 4 |
| Inhale (vapour)                   | <input type="checkbox"/> | 5 |
| Other                             | <input type="checkbox"/> | 8 |
| Not stated/inadequately described | <input type="checkbox"/> | 9 |

**Question 11.(a) to (e), asks about how you have been thinking and feeling about this drug/alcohol in the last 3 months, even if you have not been using.**

11.(a) Over the last 3 months did you ever think your use of this drug was out of control?

- |                         |                          |   |
|-------------------------|--------------------------|---|
| Never or almost never   | <input type="checkbox"/> | 0 |
| Sometimes               | <input type="checkbox"/> | 1 |
| Often                   | <input type="checkbox"/> | 2 |
| Always or nearly always | <input type="checkbox"/> | 3 |

(b) Did the prospect of missing this drug make you very anxious or worried?

- |                         |                          |   |
|-------------------------|--------------------------|---|
| Never or almost never   | <input type="checkbox"/> | 0 |
| Sometimes               | <input type="checkbox"/> | 1 |
| Often                   | <input type="checkbox"/> | 2 |
| Always or nearly always | <input type="checkbox"/> | 3 |

(c) Did you worry about your use of this drug?

- |              |                          |   |
|--------------|--------------------------|---|
| Not at all   | <input type="checkbox"/> | 0 |
| A little     | <input type="checkbox"/> | 1 |
| Quite a lot  | <input type="checkbox"/> | 2 |
| A great deal | <input type="checkbox"/> | 3 |

- (d) Do you wish you could stop?
- |                         |                          |   |
|-------------------------|--------------------------|---|
| Never or almost never   | <input type="checkbox"/> | 0 |
| Sometimes               | <input type="checkbox"/> | 1 |
| Often                   | <input type="checkbox"/> | 2 |
| Always or nearly always | <input type="checkbox"/> | 3 |

- (e) How difficult would you find it to stop or go without?
- |                 |                          |   |
|-----------------|--------------------------|---|
| Not difficult   | <input type="checkbox"/> | 0 |
| Quite difficult | <input type="checkbox"/> | 1 |
| Very difficult  | <input type="checkbox"/> | 2 |
| Impossible      | <input type="checkbox"/> | 3 |

<b>SDS SCORE</b> <u>    </u> /15
----------------------------------

\*12. What other drugs or alcohol have caused you concern?

Please specify (one or more drugs, up to a maximum of 5)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

\*13. Did you last inject/hit up any drug

- |   |                          |   |                          |
|---|--------------------------|---|--------------------------|
| in the last 3 months                                  | <input type="checkbox"/> | 1 |                          |
| more than 3 months ago<br>but less than 12 months ago | <input type="checkbox"/> | 2 | <b>Go to question 16</b> |
| 12 months ago or more                                 | <input type="checkbox"/> | 3 | <b>Go to question 16</b> |
| never injected  | <input type="checkbox"/> | 4 | <b>Go to question 16</b> |
| Not stated/inadequately described                     | <input type="checkbox"/> | 9 |                          |

14. How many times in the last 3 months did you use a needle and syringe after someone else had already used it (including your sex partner and even if it was cleaned)?

- |                    |                          |   |
|--------------------|--------------------------|---|
| More than 10 times | <input type="checkbox"/> | 1 |
| 6 to 10 times      | <input type="checkbox"/> | 2 |
| 3 to 5 times       | <input type="checkbox"/> | 3 |
| Twice              | <input type="checkbox"/> | 4 |
| Once               | <input type="checkbox"/> | 5 |
| Never              | <input type="checkbox"/> | 6 |

15. Please tell me if you have shared any of the following injecting equipment with anyone else in the last 3 months.  
**(Please circle either YES or NO for each question, a-f)**

		1	0
<b>a</b>	Spoon	<b>YES</b>	<b>NO</b>
<b>b</b>	Water	<b>YES</b>	<b>NO</b>
<b>c</b>	Filter	<b>YES</b>	<b>NO</b>
<b>d</b>	Tourniquet	<b>YES</b>	<b>NO</b>
<b>e</b>	Drug solution/mix	<b>YES</b>	<b>NO</b>
<b>f</b>	Swabs	<b>YES</b>	<b>NO</b>

16. How many times have you overdosed in the last 3 months ?

Please specify \_\_\_\_\_ times

**The next seven questions are about the drugs and alcohol you have taken in the last month (that is, the last 30 days). Please refer to Charts 2 & 3, page 17 of this BTOM questionnaire.**

- 17.(a) How many days in the last month did you drink alcohol? (beer, wine, spirits)

Please specify \_\_\_\_\_ days

- (b) On average, how many standard drinks did you have on those days when you were drinking? (please refer to standard drinks chart if required)

Please specify \_\_\_\_\_ drinks

- 18.(a) How many days in the last month did you use heroin or another opioid-based drug? That is, morphine, pethidine, codeine or street methadone (not including legally obtained methadone).

Please specify \_\_\_\_\_ days

- (b) On average, how many (hits / pills / smokes / oral street (diverted) methadone – **circle whichever is appropriate**) did you have on those days when you used an opioid-based drug?

Please specify \_\_\_\_\_ hits/pills/smokes/oral street methadone

- 19.(a) How many days in the last month did you use cannabis (marijuana, dope, grass, hash, pot)?

Please specify \_\_\_\_\_ days

- (b) On average, how many (cones / joints – **circle whichever is appropriate**) did you have on those days when you used cannabis?

Please specify \_\_\_\_\_ cones/joints

20.(a) How many days in the last month did you use cocaine (coke)?

Please specify \_\_\_\_\_ days

(b) On average how many (hits / snorts / pipes – **circle whichever is appropriate**) did you have on those days when you used cocaine?

Please specify \_\_\_\_\_ hits/snorts/pipes

21.(a) How many days in the last month did you use amphetamines (speed, wiz, go-ee, ice)?

Please specify \_\_\_\_\_ days

(b) On average, how many (pills / snorts / hits / pipes – **circle whichever is appropriate**) did you have on those days when you did use amphetamines?

Please specify \_\_\_\_\_ pills/snorts/hits/pipes

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

Please specify \_\_\_\_\_ days

(b) How many (pills / hits – **circle whichever is appropriate**) did you have on those days when you did use tranquilisers?

Please specify \_\_\_\_\_ pills/hits

23.(a) How many days in the last month did you use tobacco (cigarettes, cigars, pipe tobacco)?

Please specify \_\_\_\_\_ days

(b) How many (cigarettes / cigars / pipes - **circle whichever is appropriate**) did you have on those days when you did use tobacco?

Please specify \_\_\_\_\_ cigarettes/cigars/pipes



## Section D

The questions in this section concern the social aspects of your life over the last 3 months, (things like money, friends, etc.).

28. How often in the last 3 months have you had any money problems, including arguing about money or not having enough for food or housing?

Never or almost never	<input type="checkbox"/>	0
Sometimes	<input type="checkbox"/>	1
Often	<input type="checkbox"/>	2
Always or nearly always	<input type="checkbox"/>	3

29. How often in the last 3 months have you had conflict with your partner/spouse? By conflict, I mean verbal abuse, serious argument or violence, not a routine difference of opinion.

Not applicable (that is, no partner)	<input type="checkbox"/>	8
Never or almost never	<input type="checkbox"/>	0
Sometimes	<input type="checkbox"/>	1
Often	<input type="checkbox"/>	2
Always or nearly always	<input type="checkbox"/>	3

30. How often in the last 3 months have you had conflict with your relatives?

No contact with relatives	<input type="checkbox"/>	8
Never or almost never	<input type="checkbox"/>	0
Sometimes	<input type="checkbox"/>	1
Often	<input type="checkbox"/>	2
Always or nearly always	<input type="checkbox"/>	3

31. How often in the last 3 months have you had conflict with your employer/school?

Not employed/not at school	<input type="checkbox"/>	8
Never or almost never	<input type="checkbox"/>	0
Sometimes	<input type="checkbox"/>	1
Often	<input type="checkbox"/>	2
Always or nearly always	<input type="checkbox"/>	3

32. How much of the time over the last 3 months have you lived with anyone who uses drugs?

Do not live with a drug user	<input type="checkbox"/>	0
Some of the time	<input type="checkbox"/>	1
A lot of the time	<input type="checkbox"/>	2
All or nearly all of the time	<input type="checkbox"/>	3

33. How much of the time over the last 3 months have you spent with friends who don't use drugs?

- |            |                          |   |
|------------|--------------------------|---|
| Very often | <input type="checkbox"/> | 0 |
| Often      | <input type="checkbox"/> | 1 |
| Sometimes  | <input type="checkbox"/> | 2 |
| Never      | <input type="checkbox"/> | 3 |

34.(a) How many times in the past 3 months have you been arrested?

Please specify \_\_\_\_\_ times

(b) How many of these arrests were for offences allegedly committed in the past 3 months?

Please specify \_\_\_\_\_ arrests

35.(a) Have you had any involvement with Child Protection Services, (e.g. DOCS) in the past 3 months?

YES  1 (Go to Qu. 35(b))      NO  0 (Go to Qu. 36)

(b) If yes, did you receive supportive services?      YES  1      NO  0  
(e.g. housing assistance, food or other services)

has a child been restored to your care?      YES  1      NO  0

has a child been removed from your care?      YES  1      NO  0



## Section E. Treatment Specific Section: Detoxification

### Question 36 to be completed by client at the commencement of treatment

36. Have you experienced a complicated withdrawal, requiring medical intervention, previous to this treatment?

Yes  1                      No  0

### Question 37 to be completed by clinician at the cessation of treatment

37.(a) Were medications used to assist the client with withdrawal management?

Yes  1                      No  0

(b) If yes, please specify medication(s) \_\_\_\_\_  
\_\_\_\_\_

### Questions 38-40 are to be administered to the client at the cessation of treatment

38. How would rate the severity of withdrawal symptoms you experienced on this occasion?

No symptoms	<input type="checkbox"/>	0
Mild	<input type="checkbox"/>	1
Moderate	<input type="checkbox"/>	2
Severe	<input type="checkbox"/>	3
Very severe	<input type="checkbox"/>	4

39. How well did the staff prepare you for what you would experience during withdrawal?

Extremely well	<input type="checkbox"/>	0
Well	<input type="checkbox"/>	1
Acceptable	<input type="checkbox"/>	2
Could have been better prepared	<input type="checkbox"/>	3
Very poorly prepared	<input type="checkbox"/>	4

40. To what extent were you satisfied with the treatment service you received?

Extremely satisfied	<input type="checkbox"/>	0
Very satisfied	<input type="checkbox"/>	1
Satisfied	<input type="checkbox"/>	2
Not very satisfied	<input type="checkbox"/>	3
Very unsatisfied	<input type="checkbox"/>	4

## Section E. Treatment Specific Section: Rehabilitation

### Question 41 is to be completed at the commencement of treatment

41. How many times have you ever been in residential rehabilitation?

\_\_\_\_\_ times

### Questions 42-44 are to be completed by the clinician at the cessation of treatment

42. On average, how many formal counselling sessions, of 30 minutes or over, has the client attended per week?

\_\_\_\_\_ sessions per week

43. On average, how many (therapeutic) group sessions has the client attended per week?

\_\_\_\_\_ sessions per week

44. On average, how many self-help groups has the client attended per week?

\_\_\_\_\_ sessions per week

### Question 45 to be administered to the client at the cessation of treatment

45. To what extent were you satisfied with the treatment service you have received?

- |                     |                          |   |
|---------------------|--------------------------|---|
| Extremely satisfied | <input type="checkbox"/> | 0 |
| Very satisfied      | <input type="checkbox"/> | 1 |
| Satisfied           | <input type="checkbox"/> | 2 |
| Not very satisfied  | <input type="checkbox"/> | 3 |
| Very unsatisfied    | <input type="checkbox"/> | 4 |

## Section E. Treatment Specific Section: Counselling

### Questions 46-48 are to be completed at the commencement of treatment

46. What led you to enter treatment on this occasion? (you may tick more than one box)

- |  |                          |   |
|--|--------------------------|---|
| health                                   | <input type="checkbox"/> | 1 |
| family relationships (including partner) | <input type="checkbox"/> | 2 |
| employment                               | <input type="checkbox"/> | 3 |
| financial                                | <input type="checkbox"/> | 4 |
| legal (e.g. mandatory requirement)       | <input type="checkbox"/> | 5 |
| emotional well-being (not coping)        | <input type="checkbox"/> | 6 |
| other                                    | <input type="checkbox"/> | 8 |

47. What is the main goal you wish to achieve through your involvement in this program? (tick only one box)

- |                        |                          |   |
|------------------------|--------------------------|---|
| Stopping use           | <input type="checkbox"/> | 1 |
| Cutting down           | <input type="checkbox"/> | 2 |
| Remaining abstinent    | <input type="checkbox"/> | 3 |
| Fulfilling court order | <input type="checkbox"/> | 4 |
| Other                  | <input type="checkbox"/> | 8 |

48. What other services have you accessed in the last 3 months? (you may tick more than one box)

- |  |                          |   |
|--|--------------------------|---|
| Counselling  | <input type="checkbox"/> | 1 |
| Detoxification   | <input type="checkbox"/> | 2 |
| Rehabilitation (i.e. residential)                        | <input type="checkbox"/> | 3 |
| Mental Health  | <input type="checkbox"/> | 4 |
| Maintenance Pharmacotherapy (e.g. methadone maintenance) | <input type="checkbox"/> | 5 |
| None   | <input type="checkbox"/> | 6 |
| Other  | <input type="checkbox"/> | 8 |

If other, please specify \_\_\_\_\_

### Questions 49 & 50 are to be completed by the clinician at the cessation of treatment

49. The principal type of service provided to this client was

- |                            |                          |   |
|----------------------------|--------------------------|---|
| assessment & referral only | <input type="checkbox"/> | 1 |
| education & information    | <input type="checkbox"/> | 2 |
| group program              | <input type="checkbox"/> | 3 |
| individual counselling     | <input type="checkbox"/> | 4 |
| family counselling         | <input type="checkbox"/> | 5 |

50. What was the main model of counselling used?

- |   |                          |    |
|---|--------------------------|----|
| Cognitive Behavioral Therapy<br>(e.g., relapse prevention)                                  | <input type="checkbox"/> | 1  |
| Narrative   | <input type="checkbox"/> | 2  |
| Psychodynamic   | <input type="checkbox"/> | 3  |
| Brief solution focused  | <input type="checkbox"/> | 4  |
| 12-Step Program   | <input type="checkbox"/> | 5  |
| Motivation Interviewing   | <input type="checkbox"/> | 6  |
| Crisis intervention   | <input type="checkbox"/> | 7  |
| <b>Not applicable (i.e. assessment/education<br/>&amp; information) <u>Go to Qu. 41</u></b> | <input type="checkbox"/> | 8  |
| Other   | <input type="checkbox"/> | 98 |

If other, please specify \_\_\_\_\_

**Questions 51-53 are to be asked of the client at the cessation of treatment**

51. To what extent do you feel that the main goal for which you sought treatment has been achieved?

- |                        |                          |   |
|------------------------|--------------------------|---|
| Almost completely      | <input type="checkbox"/> | 0 |
| To a large extent      | <input type="checkbox"/> | 1 |
| To a reasonable extent | <input type="checkbox"/> | 2 |
| To a small extent      | <input type="checkbox"/> | 3 |
| Not at all             | <input type="checkbox"/> | 4 |

52. To what extent were you satisfied with the treatment service you received?

- |                     |                          |   |
|---------------------|--------------------------|---|
| Extremely satisfied | <input type="checkbox"/> | 0 |
| Very satisfied      | <input type="checkbox"/> | 1 |
| Satisfied           | <input type="checkbox"/> | 2 |
| Not very satisfied  | <input type="checkbox"/> | 3 |
| Very unsatisfied    | <input type="checkbox"/> | 4 |

53. To what extent were you satisfied with the relationship established between yourself and the counsellor?

- |                     |                          |   |
|---------------------|--------------------------|---|
| Extremely satisfied | <input type="checkbox"/> | 0 |
| Very satisfied      | <input type="checkbox"/> | 1 |
| Satisfied           | <input type="checkbox"/> | 2 |
| Not very satisfied  | <input type="checkbox"/> | 3 |
| Very unsatisfied    | <input type="checkbox"/> | 4 |

## Section F

Complete the following section at first interview (i.e. baseline interview) only

**\*Treatment Delivery Setting:** *(tick one box only)*

- 1 Non-residential/outpatient/community setting
- 2 Residential/inpatient setting
- 3 Home
- 4 Outreach setting
- 5 Correctional setting
- 6 Therapeutic community
- 8 Other

**\*Main Treatment Type:** *(tick one box only)*

- 10 Counselling
- Withdrawal management (detoxification)
- 21 Inpatient/residential withdrawal management
  - 22 Outpatient withdrawal management
- Rehabilitation Activities
- 31 Residential rehabilitation activities
  - 32 Day program rehabilitation activities
- 40 Maintenance Pharmacotherapy
- Consultation Activities
- 51 Inpatient consultation (for AHS internal use only)
  - 52 Outpatient consultation (excluding withdrawal management)
  - 60 Support and case management only
  - 91 Assessment only
  - 92 Information and education only
  - 98 Other

**\*Source of referral to treatment: (tick one box only)**

- 01 Self
- 02 Family member/friend
- 03 General practitioner
- 04 Medical officer / specialist
- 05 Psychiatric hospital
- 06 Other hospital
- 07 Residential community mental health care unit
- 08 Residential alcohol and other drug treatment agency
- 09 Other residential community care unit
- 10 Education institution
- 11 Non-residential community mental health centre
- 12 Non-residential alcohol and other drug treatment agency
- 13 Non-residential community health centre
- 14 Other non-health service agency
- 15 Police diversion
- 16 Court diversion
- 17 Other criminal justice setting
- 18 Workplace (EAP)
- 19 Family and child protection service
- 20 Needle and syringe program
- 21 Medically supervised injecting centre
- 98 Other
- 99 Not stated/inadequately described

**\*Previous treatment: *More than one box may be ticked.***

- 10 Counselling
- Withdrawal management (detoxification)
- 21 Inpatient/residential withdrawal management
- 22 Outpatient withdrawal management
  
- Rehabilitation Activities
- 31 Residential rehabilitation activities
- 32 Day program rehabilitation activities
  
- Maintenance Pharmacotherapies
- 41 Naltrexone
- 42 Buprenorphine
- 44 Slow release oral morphine
- 45 Methadone
- 46 Acamprosate
- 47 Disulfiram
- 49 Other maintenance pharmacotherapies
  
- Consultation Activities
- 52 Inpatient consultation
- 52 Outpatient consultation (excluding withdrawal management)
- 60 Support and case management only
- 91 Assessment only
- 92 Information and education
- 98 Other
- 99 No previous treatment

## NSW ALCOHOL & OTHER DRUG TREATMENT SERVICES BRIEF TREATMENT OUTCOME MEASURE (BTOM)

### Section G

Complete this section upon cessation of treatment only

Agency code:                        Agency Name: \_\_\_\_\_

Agency location:                  Area Health Service: \_\_\_\_\_

\*Client code:                   

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\*Date of commencement of treatment episode:    //

\*Date of cessation of treatment episode:            //

\*Reason for cessation of treatment episode: (*tick one box only*)

- 01    Treatment completed
- 02    Transferred/referred to another service
- 03    Left without notice
- 04    Left against advice
- 05    Left voluntary (non-compliance)
- 06    Moved out of area
- 07    Sanctioned by drug court/court diversion program
- 08    Imprisoned, other than through court sanction
- 09    Released from prison
- 10    Died
- 11    Ceased to participate upon expiation
- 98    Other
- 99    Not stated/inadequately described

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\*Referral to another service: (*tick one box only*)

- 03    General practitioner
- 04    Medical officer / specialist
- 05    Psychiatric hospital
- 06    Other hospital
- 07    Residential community mental health care unit
- 08    Residential alcohol and other drug treatment agency
- 09    Other residential community care unit
- 10    Education institution
- 11    Non-residential community mental health centre
- 12    Non-residential alcohol and other drug treatment agency
- 13    Non-residential community health centre
- 14    Other non-health service agency
- 18    Workplace (EAP)
- 19    Family and child protection service
- 97    No referral
- 98    Other
- 99    Not stated/inadequately described

**\*Other treatment types:      *More than one box may be ticked. Do NOT include the "Main treatment types"***

10    Counselling

Withdrawal management (detoxification)

21    Inpatient/residential withdrawal management

22    Outpatient withdrawal management

Rehabilitation Activities

31    Residential rehabilitation activities

32    Day program rehabilitation activities

Maintenance Pharmacotherapies

41    Naltrexone

42    Buprenorphine

44    Slow release oral morphine

45    Methadone

46    Acamprosate

47    Disulfiram

49    Other maintenance pharmacotherapies

Consultation Activities

51    Inpatient consultation

52    Outpatient consultation (excluding withdrawal management)

98    Other

99    No other services provided



## Appendix

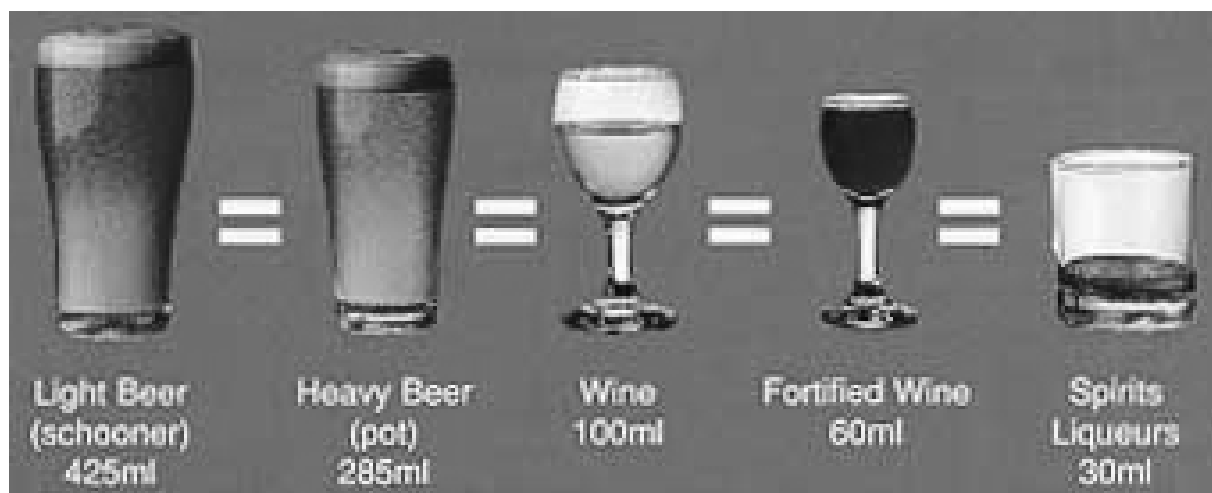
**Chart 1. Three Month Chart: Days in the past 3 months**

Every day	90	3 times a month	9
6 times a week	77	Twice a month	6
5 times a week	64	Five days	5
4 times a week	51	Four days	4
3 times a week	39	Three days	3
Twice a week	26	Two days	2
Once a week	13	One day only	1
4 times a month	12		

**Chart 2. One Month Chart: Days of estimated drug/alcohol use in the past 1 month**

Every day	30	Twice a week	9
6 times a week	26	Once a week	4
5 times a week	22	Three days	3
4 times a week	17	Two days	2
3 times a week	13	One day only	1

**Chart 3. Standard Drink Chart (for use in Question 17)**



**Appendix 4: BTOM Scores Summary Sheet**

# BTOM scores summary sheet

Client name: \_\_\_\_\_ Commencement of Treatment Date: \_\_\_\_\_

Client code: \_\_\_\_\_ Agency Name: \_\_\_\_\_

BTOM SCORES	Baseline			3 month			_ month			_ month			_ month		
Date of interview															
1. Severity of Dependence Scale score/15															
2. Blood Borne Virus Risk Scale score/7															
3. Poly-drug Use Scale score/7															
<b>4. Occasions of Drug Use Scale scores. (see overleaf)</b> [F = Frequency (a), Q = Quantity (b), T = Total]															
	Baseline			3 month			_ month			_ month			_ month		
	F	Q	T	F	Q	T	F	Q	T	F	Q	T	F	Q	T
ODUS alcohol															
ODUS opiates															
ODUS cannabis															
ODUS cocaine															
ODUS amphetamines															
ODUS tranquillisers															
ODUS tobacco															
	Baseline			3 month			_ month			_ month			_ month		
5. Health score/ 5 (Question 24)															
6. Psychological functioning score/8															
7. Social Functioning Scale score/18															

## **GUIDE TO SCORING THE BTOM**

### **1. Severity of Dependence Scale (SDS – questions 11a -11e)**

$$\text{SDS score} = Q11a + Q11b + Q11c + Q11d + Q11e$$

### **2. Blood Borne Virus Risk Scale (BBVRS – questions 14 & 15)**

1. If a client has scored 1, 2, 3, 4 or 5 for question 14, give them 1 point, as shown below:
2. If the client has scored 6 for question 14, give them 0 points, as shown below:

14. How many times in the last 3 months did you use a needle and syringe after someone else had already used it (including your sex partner and even if it was cleaned)?

More than 10 times	<input type="checkbox"/>	1	} 1 point
6 to 10 times	<input type="checkbox"/>	2	
3 to 5 times	<input type="checkbox"/>	3	
Twice	<input type="checkbox"/>	4	
Once	<input type="checkbox"/>	5	
Never	<input type="checkbox"/>	6	0 points

3. The client gets one point for each box ticked in question 15.
4. Add up the client's points for questions 14 and 15 to get the BBVRS score. The client receives a score out of 7.

### **3. Poly-drug Use Scale (Questions 17a, 18a, 19a, 20a, 21a, 22a & 23a)**

1. If the client has taken the drug the question refers to on one or more days in the last month, they score 1 point for that question.
2. If the client has not taken the drug the question refers to in the last month, they score 0 points for that question.
3. Add up the client's points for questions 17a, 18a, 19a, 20a, 21a, 22a, and 23a to get the polydrug score. The client receives a score out of 7.

### **4. Occasions of Drug Use Scale (ODUS - questions 17-23).**

- This gives 7 separate totals for the client's reported occasions of use of each class of drug in the last month.

- If the client has not used a class of drugs in the last month, their total for that class is 0.

ODUS alcohol	= Q17a x Q17b
ODUS opiates	= Q18a x Q18b
ODUS cannabis	= Q19a x Q19b
ODUS cocaine	= Q20a x Q20b
ODUS amphetamines	= Q21a x Q21b
ODUS tranquillisers	= Q22a x Q22b
ODUS tobacco	= Q23a x Q23b

### **5. Health Score (question 24)**

The Health Score is simply the numbered code for the box ticked in Question 24.

### **6. Psychological Well-Being Scale (PWBS -question 27a-h).**

$$\text{PWBS score} = Q27a + Q27b + Q27c + Q27d + Q27e + Q27f + Q27g + Q27h$$

### **7. Social Functioning Scale (SFS - question 28-33).**

- 'Not applicable' responses are possible for questions 29 –31. They are given the value '8', to indicate they are missing.
- For the purposes of calculating this score, all responses to questions 28 –33 that are *not* shown as being 'not applicable', are referred to as 'valid responses'.

- a. **If the client has given no 'Not applicable' responses:**

$$\text{SFS score} = Q28 + Q29 + Q30 + Q31 + Q32 + Q33$$

- b. **If the client has given one 'Not applicable' response:**

$$\text{SFS score} = (\text{sum of valid responses}) \times 1.2$$

- c. **If the client has given two 'Not applicable' responses:**

$$\text{SFS score} = (\text{sum of valid responses}) \times 1.5$$

- d. **If the client has given three 'Not applicable' responses:**

$$\text{SFS score} = (\text{sum of valid responses}) \times 2$$

**Appendix 5: BTOM Contact Follow-up Form**



**3. Follow-up attempts.**

Client name \_\_\_\_\_ Client id. no. |\_|\_|\_|\_|\_|\_|\_|\_| Page no \_\_\_\_\_

Contact attempt number	Phone no. called	Date	Time	Comments