

G. Martin, W. Swift & J. Copeland

**The Adolescent Cannabis Check-up:
A brief intervention for young
cannabis users.
Findings and Treatment Manual.
NDARC Technical Report No. 200**

**THE ADOLESCENT CANNABIS
CHECK-UP:
A BRIEF INTERVENTION FOR
YOUNG CANNABIS USERS.
FINDINGS AND TREATMENT
MANUAL**

Greg Martin, Wendy Swift and Jan Copeland

Technical Report Number 200

ISBN: 1 877027 91 X

This project was funded by the
Australian Government Department of Health and Ageing

**©National Drug and Alcohol Research Centre, University of New South Wales,
Sydney, 2004**

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. All other rights are reserved. Requests and enquiries concerning reproduction and rights should be addressed to the information manager, National Drug and Alcohol Research Centre, University of New South Wales, Sydney, NSW 2052, Australia.

ACKNOWLEDGMENTS

The authors would like to acknowledge the support of the Australian Government Department of Health and Ageing; the funding body for this study.

Thanks also to staff of the Manly Drug Education and Counselling Centre, who contributed considerable assistance to the study in the form of participant referrals and interview space.

We would also like to thank Amanda Reid, Carolyn Day, Peter Lawrinson, Etty Matalon, Stewart Stubbs and Peter Gates for assistance with data collection.

Table of Contents

ACKNOWLEDGMENTS.....	iv
1. INTRODUCTION	1
1.1 Background.....	1
1.2 Cannabis use among young people.....	2
1.2.1 Epidemiology of use and related problems.....	2
1.2.2 Substance use interventions for young people.....	3
1.2.3 The Check-up approach.....	4
1.3 Study Aims.....	6
2. METHODS	7
2.1 Design.....	7
2.2 The intervention sessions.....	7
2.2.1 Session 1: The concerned other session.....	7
2.2.2 Session 2: The assessment session.....	8
2.2.3 Session 3: The feedback session.....	9
2.2.4 Session 4: The skills and strategies (CBT) session.....	9
2.3 Procedure.....	9
2.3 Data analysis.....	10
3. RECRUITMENT.....	11
3.1 Eligibility criteria.....	11
3.1.1 Concerned others.....	11
3.1.1 Adolescents.....	11
3.2 Recruitment sources and issues.....	11
4. RESULTS.....	13
4.1 Sample characteristics: Concerned others.....	13
4.2 Sample characteristics: Young people.....	14
4.2.1 Compliance.....	14
4.2.2 Source.....	14
4.2.3 Demographics.....	14
4.2.4 Cannabis Use.....	15
4.2.5 Cannabis dependence and problems.....	16
4.2.6 Other Drug Use.....	17
4.2.7 Legal issues.....	18
4.2.8 Health.....	18
4.2.9 Social/family issues.....	18
4.3 Outcome at three month follow-up.....	19
4.4 Outcome at six month follow-up.....	20
4.5 Acceptability of Check-up.....	21
4.6 Randomised controlled trial: single session CBT.....	23
5. DISCUSSION AND CONCLUSIONS	26
6. Products	29
8. References	31
Appendix A: ADOLESCENT CANNABIS CHECK-UP TREATMENT MANUAL	37
Appendix B: ADOLESCENT CCU TIMELINE FOLLOW-BACK (TLFB)	
QUESTIONNAIRE PROCEDURES	80
Appendix C: QUIICK SCREEN FOR CONCERNED OTHERS.....	89
Appendix D: QUICK SCREEN FOR ADOLESCENTS.....	99
Appendix E: ADOLESCENT BASELINE ASSESSMENT.....	111

1. INTRODUCTION

1.1 Background

The Adolescent Cannabis Check-up was funded by the Australian Government Department of Health and Aging.

The project was a collaboration between the National Drug and Alcohol Research Centre and a number of organizations and individuals in Australia and the United States. It arose from earlier work conducted by the investigators on brief cognitive behavioural and motivational interventions for cannabis use among adults, and from a recognition of increased community concern about cannabis use among youth and the paucity of age-appropriate interventions available. The project involved the development of an evidence-based brief intervention specifically designed for young cannabis users, and a study of the feasibility and efficacy of that intervention.

The aims of the study were to increase the range of options available to young people who use cannabis, to contribute to the evidence base for the effectiveness of brief interventions for this group, and to inform policy development in terms of best practice for early and brief intervention for young cannabis users. Through the explicit inclusion of non-treatment seekers in the trial the project broadened the potential catchment for participants in an intervention, which may be particularly relevant for this age group who are rarely active treatment seekers. The trial's focus on early and brief intervention for young cannabis users (irrespective of treatment seeking) is consistent with the goal of providing access to effective, low cost, low intensity intervention at a population level to any young people who may benefit from it.

This technical report presents the results of the Adolescent Cannabis Check-up feasibility study, and includes the treatment manual and assessment instruments which were developed for the study. The treatment manual provides clinicians with a detailed clinical protocol to implement a Cannabis Check-up intervention.

1.2 Cannabis use among young people

1.2.1 Epidemiology of use and related problems

Population-based studies have consistently shown cannabis to be the most widely used illicit drug in various communities around the world (EMCDDA, 2002; SAMHSA, 2002), particularly amongst young people. Similarly in Australia; data from the 2001 National Drug Strategy Household Survey indicate that approximately one third (34.3%) of 14-19 year olds have ever used cannabis, and approximately one quarter (26.6%) have used in the past year. Of those who have used in the past year, 35% of young males and 25% of young females reported using cannabis at least weekly (Australian Institute of Health and Welfare, 2002). Although these data appear to reflect a decline in cannabis use among young Australians since the 1998 survey, the differences in data collection make direct comparisons difficult. The widespread use of cannabis among young people is confirmed by data from the 1999 Australian School Student's Alcohol and Drugs Survey which found 29% of 12-17 year old secondary school students had ever used cannabis. The prevalence of use increased with age up to 50% for 17 year olds. In all age groups use was somewhat more common among males (White, 2001). It is now the case in Australia that young people (aged 14-19) are more likely to be recent users of cannabis than recent users of tobacco (26% vs. 20%) (AIHW, 2002).

A consistent picture of the natural history of cannabis use has emerged from the literature. Typically most cannabis use remains experimental or intermittent, but the prevalence and frequency of use tend to increase over the mid to late teens, before beginning to decline in the mid 20s (Coffey et al, 2000; Perkonig et al, 1999; Poulton et al, 1997; Chen and Kandel, 1995). Not all young people's cannabis use, however, conforms to this general pattern and a minority report more intense patterns of use that increase the likelihood of and exposure to cannabis-related harms (Johnston et al, 2001; Perkonig et al, 1999; Poulton et al, 1997). It has been reported that an earlier age of initiation and more frequent use of cannabis predict the escalation and persistence of use (Coffey et al, 2000; DeWit et al, 2000; Poulton et al, 1997). There is strong evidence that the average age of initiation of cannabis use has been decreasing among successive birth cohorts over several decades (Degenhardt, Lynskey and Hall, 2000).

Although experimentation is a normal part of adolescent development, young people who regularly use cannabis may risk negative effects at a time of rapid development and transitions in life roles. There is evidence that young people (14 to 15 years) are more likely to suffer the adverse consequences of regular cannabis use than their 20 to 21 year old peers (Fergusson, Horwood and Swain-Campbell, 2002).

In particular, earlier and/or greater involvement with cannabis is associated with an increased risk of a range of problems such as poorer mental health and psychosocial adjustment, lower educational achievement, school drop out, problematic use of other substances, risky sexual behaviour and criminal offending (Lynskey, Heath, Bucholz et al, 2003; Patton, Coffey, Carlin, Degenhardt, Lynskey and Hall, 2002; Arseneault, Cannon, Poulton, Murray, Caspi and Moffitt, 2002; Brook et al, 1999; Fergusson, Horwood and Beatrais, 2003; Fergusson and Horwood, 1997; 2000a; Fergusson, Horwood and Lynskey, 1994; Fergusson, Horwood and Swain-Campbell, 2002; Lynskey and Hall, 2000). There is not necessarily a simple cause and effect relationship between the extent of cannabis use and adverse outcomes. It may be that these associations are the result of third variables which are causally related to both increased risk of cannabis use and increased risk of the other outcomes (Hall, Johnston and Donnelly, 1999; Lynskey et al, 2003; Morral, McCaffrey and Paddock, 2002).

Young people are more likely to develop cannabis dependence than adults, possibly because of an increased susceptibility to the syndrome or the impact of age-cohort effects (Chen and Anthony, 2003; Dennis, Babor, Roebuck and Donaldson, 2002; Kandel, Chen, Warner, Kessler, & Grant, 1997; Swift, Hall and Teesson, 2001; Winters, 1999). The population prevalence of cannabis dependence increases throughout adolescence, up to levels of 10% among young adults (Coffey et al, 2002; Fergusson and Horwood, 2000b; Perkonig et al, 1999; Poulton et al, 1997). Other studies report substantial proportions (>50%) of young people attending emergency rooms (Colby, Chung, O'Leary, Spirito, Rohsenow and Monti, 1998) and drug and alcohol treatment services (e.g., Crowley et al, 1998) meet diagnostic criteria for cannabis use disorders. As spontaneous remission of cannabis use may be somewhat rare among adolescent regular cannabis users (Perkonig et al, 1999; von Sydow et al, 2001), there is a significant group who may benefit from assistance in order to prevent or overcome cannabis-related problems including abuse or dependence.

1.2.2 Substance use interventions for young people

Currently, few young people who might benefit from professional assistance for their substance use choose to access relevant services. Few adolescents reporting substance use disorder symptoms receive treatment although there have been large increases in those presenting for cannabis related problems in the United States, typically to outpatient settings (Muck, Zempolich, Titus, Fishman, Godley and Schwebel, 2001). In 1998, 74% of young people presenting for treatment did so for cannabis use (Dennis, Titus, Diamond et al, 2002). Self-referral is uncommon, with most referred by family, or the educational or juvenile justice systems; recent trends towards mandating young people to attend treatment programs largely explain the large increase in demand (e.g., Brody and Waldron, 2000; Webb et al, 2002). In Australia, the National Minimum Data Set indicates that in 2001-2002 people aged 19 years or under accounted for relatively few (13.1%) of all treatment episodes, but of these cannabis was the most commonly nominated (45.5%) drug of concern (AIHW, 2003). The New South Wales Minimum Data Set shows that only a minority of this age group (29.4%) were self-referrals (Copeland, unpublished data).

Rigorous evaluations of the effectiveness of adolescent substance abuse treatments have recently been completed or are currently in progress, with greatly increased attention having been devoted to this population in recent years. In particular, there has been an increased focus on models targeted towards the issues and developmental stage of young people, rather than simply applying (inappropriate) adult programs to this group (for reviews see Muck et al, 2001; Wagner, Brown, Monti, Myers and Waldron, 1999; Williams, Chang and the Addiction Centre Adolescent Research Group, 2000). Manualised therapies are now becoming available for dissemination to the field. Prior to the late 1990s, the conclusions of the few published studies had been limited by methodological problems (Deas & Thomas, 2001).

Outpatient treatments for young people have had mixed success in reducing cannabis use. For example, the Treatment Outcome Prospective Study (TOPS) of 87 adolescents compared daily cannabis use in the year prior to, and the year following, treatment. It found a reduction of 42% for those receiving less than three months of treatment and an increase of 13% among those who received three or more months of treatment (Hubbard, Cavanaugh, Craddock, & Rachel; 1989, 1985a). The Services Research Outcome Study found that cannabis use increased 2-9% among 156 adolescents in the five years after they received any kind of treatment (Office of Applied Studies, 1995). However, two recent studies, reported slight (National Treatment Improvement Evaluation Study) (Gerstein and Johnson, 1999) to moderate (Drug Abuse Treatment Outcome Study (DATOS) – Adolescents) reductions in cannabis use at follow-up.

For example, there was up to a 50% reduction in regular cannabis use among participants in the DATOS-A at a 12 month follow-up (Rounds-Bryant and Staab, 2001). The lack of untreated control groups in these studies makes it difficult to evaluate the outcomes. Treatment may be helpful, but relapse rates are high (20-50%), retention in treatment is problematic, and long-term outcomes are unknown (Muck et al, 2001).

Preliminary outcome data from the Cannabis Youth Treatment (CYT) Project, a rigorous, multi-site intervention study of 600 young cannabis users aged between 12 and 18 years, compare favourably with previous studies (Dennis and Babor, 2001; Dennis, Babor, Diamond, Donaldson, Godley and Tims et al., 1998; for a summary of the study and the baseline characteristics of the sample see Dennis, Titus, Diamond et al, 2002; Tims, Dennis, Hamilton, Buchan, Diamond, Funk and Brantley, 2002). Participants were randomised to one of five outpatient interventions of varying type and intensity. A non-treatment control condition was not included in the design. Compared to intake, at six months there was an increase in reported abstinence, and decreases in symptoms of cannabis abuse or dependence and a range of other behaviour problems (e.g., truancy, criminal justice involvement, school problems, family problems, and violence). There was some evidence for differential effectiveness of the five treatments by problem severity, with the briefest treatment being more effective among low severity adolescents, and longer, more intensive interventions most effective with high severity adolescents. Otherwise, little difference was found across the treatment conditions.

While the CYT offers a menu of effective treatments, the results may apply primarily to treatment-seeking adolescents, many of whom may have been coerced into treatment in various ways. Few interventions tailored to attract and enhance motivation in non-treatment seeking adolescents have been developed or studied systematically.

Several recent studies have shown promise utilising brief motivational enhancement treatment (MET) approaches with adolescent substance users (see Monti, Colby and O'Leary, 2001 for a review). Motivational enhancement treatment refers to counselling that incorporates motivational interviewing, defined as "a directive, client-centered counselling style for eliciting behavior change by helping clients to explore and resolve ambivalence" (Rollnick & Miller, 1995). For example, Monti and colleagues (1999) used MET with adolescent drinkers in an emergency room setting and demonstrated reductions in alcohol use, drinking and driving, traffic violations, and alcohol-related injuries and problems. Colby, Monti and colleagues (1998) compared brief advice and brief MET with adolescent tobacco smokers in an emergency room setting. While both groups reduced their days of smoking and levels of nicotine dependence, there were no significant differences between interventions. In a non-treatment seeking population of young people recruited via peers, McCambridge and Strang (2004) found a single session of motivational interviewing was associated with significant reductions in reported cannabis, alcohol and tobacco use at 12 week follow-up, as compared with a no intervention group.

1.2.3 The Check-up approach

The Cannabis Check-Up is a brief motivational intervention modelled on the Drinkers' Check-Up for problem drinkers (Miller & Sovereign, 1989). The basic Check-up model comprises a two-session assessment and feedback intervention in which a clinician helps the participant make informed choices regarding their substance use. The participant's substance use is not labelled problematic and there is no confrontation regarding use. A non-judgmental atmosphere is provided in which questions may be asked and the participant is accepted as the

expert on their own life. There is no overt attempt to make participants change their use unless requested by them.

In the initial session, assessment data are collected concerning the participant's substance use and its role in their life. This includes areas such as quantity and frequency of use; positive and negative consequences of use; the individual's life goals; readiness for change; and support networks. This information is used to prepare a Personalised Feedback Report (PFR) that is reviewed with the participant in the feedback session conducted approximately one week later.

While reviewing the PFR with the participant during the feedback session, the clinician uses MET strategies (e.g., open-ended questions, reflections, reframing, expressing empathy, and avoidance of argumentation) to elicit the participant's active and candid involvement in the session (Lawendowski, 1998; Miller & Rollnick, 1991). The general focus is on encouraging the young person to explore the personal meaning and implications of the information in an open and balanced fashion. Ambivalence is accepted as normal and is explored to assist the young person to explicitly consider both the pros and cons of cannabis use and non-use. Expressions of motivation for change are reinforced and resistance is minimised by giving attention to motivation both favouring and opposing change. If participants clearly express a desire to change their cannabis use, the clinician supports their self-efficacy by discussing various change options, including self-managed change or referrals to local drug treatment providers.

The Check-up approach has shown promise among adolescent cannabis users. In the United States, an exploratory study of a two session intervention recruited 78 young people primarily from schools, 54 of whom completed the assessment and feedback sessions and a three month follow-up interview. This approach was able to recruit and retain young cannabis smokers, many of whom were in Pre- and Contemplation stages of change. The majority (83%) reported having made voluntary reductions (stopping or reducing use) in their cannabis use in the 90 days to follow-up. There were also substantial decreases in consumption in the 30 days prior to follow-up, compared to the 30 days prior to the baseline assessment. Further, 15% (n=8) reported complete abstinence from cannabis in the 30 days prior to their follow-up session (Berguis, Swift, Roffman, Stephens and Copeland, in press). A larger study is currently underway.

1.3 Study Aims

This project targeted young people who were using cannabis but not necessarily seeking treatment or initiating efforts to stop or reduce their use. It filled a perceived gap in the capacity of existing treatment services to offer a cannabis-specific intervention that explicitly targets young people irrespective of their treatment-seeking status. It is, in part, a response to the high level of unmet need among concerned parents that was noted by project staff in an earlier treatment trial of an adult cannabis use intervention (Copeland et al., 2001). As described above (Section 1.2) it used a “Check-up” approach based on similar treatments that have been shown to be useful for alcohol and cannabis problems in adults and adolescents.

The specific objectives of the intervention were:

- To assess the effectiveness of a brief Cannabis Check-up to enhance motivation among young people to cease or reduce cannabis use;
- To evaluate the validity of parents’ concerns about the suspected levels of cannabis among their adolescent children;
- To assist the families of young people to learn how to communicate effectively their concern and encourage young people to participate in the Check-up and reduce problematic cannabis use;
- To identify, and where possible intervene with, risk and protective factors within the family; and
- To test the effectiveness of a one session cognitive behavioural intervention in reducing cannabis use and associated problems among those participants who meet criteria for cannabis abuse or dependence.

2. METHODS

2.1 Design

The study had three conceptually distinct components. The first was an assessment, education, and communication skills session for concerned others/parents. Second was the core two-session Cannabis Check-up, comprising assessment and feedback sessions for young cannabis users. All adolescent participants received this component and, as there was no control group, it was evaluated in a pre-test post-test design. The final component was a randomised controlled trial of a single session of cognitive behavioural therapy (CBT) for young people who met diagnostic criteria for cannabis abuse or dependence. Following their participation in the Check-up, eligible young people were randomised to receive the CBT session immediately or to a three month delayed treatment control group.

2.2 The intervention sessions

The content of the various sessions is briefly described below. For a more detailed account of the session content and assessment materials please refer to the Adolescent Cannabis Check-up Treatment Manual (included as Appendix A).

2.2.1 Session 1: The concerned other session

This session provided a forum for concerned others (CO), such as parents, to discuss their young person and concerns in relation to cannabis use. It was included in the study in cognisance of the fact that it is parents (rather than young people themselves) who most commonly seek assistance for a young person's cannabis use. It was intended to enlist the CO to assist in the recruitment of the young person into the study.

The CO session included an assessment, education on cannabis, discussion of general communication skills and tips on engaging the young person in the Check-up. It was intended primarily to be educational, and to support the CO's self-efficacy in talking with the young person about cannabis use. The focus of the session was determined by the specific requirements of each participant.

The goals this session were: (1) to provide accurate information on cannabis, (2) to clarify and assess the nature of the CO's specific concerns, (3) to enhance the CO's skills in effectively communicating concerns to the young person, (4) to provide a clear understanding of the nature and purpose of the Check-up, and (5) to help the CO consider and practice ways of encouraging the young person to participate in the Check-up.

The CO was interviewed to obtain data concerning their perceptions of the young person's patterns of cannabis use and its consequences, their stage of change, the young person's use of alcohol and other drugs, the CO's views of the positive and negative aspects of cannabis use, the CO's perspectives on the pros and cons of the young person changing or not changing, and other pertinent attitudes and beliefs. They also completed the 12 item version of the Family Assessment Device (a standardised psychometric test of family functioning) (Byles, Byrne, Boyle and Offord, 1988), and a risk perception questionnaire.

A set of three resource materials was developed for the study, and the COs were given two of these booklets: one containing cannabis information (*What's the deal on grass: Cannabis facts for parents*) and another containing information on communication skills (*What's the deal on grass:*

Talking with a young person about cannabis). An additional handout gave specific suggestions on how to talk with and encourage their young person to participate in the Check-up.

The *Cannabis facts for parents* booklet contains an overview of aspects of the literature on cannabis use and its effects, in the form of frequently asked questions. It was designed to provide clear, empirically-based and objective information to parents in a way that is readable and relevant to common concerns. The issues addressed include: how common is cannabis use?; what effects does cannabis have on the body?; does cannabis use lead to other drug use?; does cannabis cause brain damage?; and is cannabis linked to mental illness?

The *Talking with a young person about cannabis* booklet offers parents practical advice for communicating more clearly and effectively with their young person. It contains a variety of strategies and examples of how each may be implemented. It also includes a discussion of conversational styles that may block effective communication and are best avoided. Such techniques as the use of “I” statements; expressions of the positives about the other person; and care with tone of voice and body language are among the topics discussed.

Although developed specifically for the study, these resources have been widely disseminated to a range of treatment agencies, schools, and other community groups.

2.2.2 Session 2: The assessment session

The baseline assessment session of the young person was the first part of the core Cannabis Check-up. As this was typically the first contact with the young person, time was spent building rapport, explaining the details of the project, and responding to any concerns raised. The session consisted of a structured interview which assessed the young person’s cannabis and other substance use history, including pattern of use and cannabis abuse and dependence; perceived pros and cons of continued use; expectancies about increased/decreased use; perception of risk associated with cannabis; and stage of change. In addition to basic demographics, data were gathered on the young person’s health and mental health status, criminal involvement, educational and occupational functioning, relationship issues, and personal goals and aspirations.

Detailed information on cannabis use in the past 3 months was obtained using the Timeline Followback (TLFB) method (Sobell, Sobell, Leo and Cancilla, 1988). The TLFB is a structured calendar-based assessment method which uses mnemonic prompts and limit setting methods to increase the accuracy of self-report. Proxy DSM-IV diagnoses of cannabis abuse and dependence were made using items from the General Assessment of Individual Needs (GAIN), as used in the Cannabis Youth Treatment (CYT) Project (Dennis, Titus, Diamond et al, 2002). The five-item Severity of Dependence Scale (Gossop, Griffiths, Powis and Strang, 1992), which has been found to be a useful indicator of cannabis dependence among adult cannabis users (Swift, Copeland and Hall, 1998), provided a measure of cannabis dependence severity. The 12-item version of the Family Assessment Device (Byles, Byrne, Boyle and Offord, 1988) was used to measure the health of family functioning, and current general psychological health was assessed by the 53-item Brief Symptom Inventory (Derogatis, 1993). The young person was also requested to provide a urine sample for analysis of cannabinoid levels.

An information booklet (*What’s the deal on grass: Cannabis facts for young people*) was given to each participant. This completes the set of materials described above. The aim of this booklet is to provide easily accessible cannabis information for young people in a format that is acceptable to them. It covers many of the same questions as the parent version but the information is presented differently. We spent considerable time refining the language and presentation of the

resource, and conducted a number of focus groups with young people to ensure the content was understandable and presented appropriately.

2.2.3 Session 3: The feedback session

The feedback session was typically held about one week later. In the meantime the clinician prepared a Personal Feedback Report (PFR) based on information obtained during the assessment. The PFR was used to provide structured feedback of information including the amount of cannabis used; comparison of the individual's cannabis use with age-specific normative data; the pros and cons of using, and perception of interactions between cannabis use and individual goals. This feedback was provided within a motivational enhancement framework, with the goal of assisting the young person to make a detailed and objective assessment of their cannabis use and the role it plays in their life without feeling pressured to change. At the end of the session the young person was asked to complete a confidential evaluation form in which they rated the acceptability and usefulness of the feedback session.

2.2.4 Session 4: The skills and strategies (CBT) session

This session was held approximately one week following Session 3 and aimed to provide participants with pragmatic strategies for quitting and reducing use. The clinician and young person worked collaboratively to complete a workbook and personalise it for the individual. The session included a discussion of cannabis dependence, recognition of personal triggers, managing craving, goal setting, planning for change, behavioural self-monitoring, and relapse prevention. Again the young person was asked to complete a confidential evaluation form on which they rated the session in general and the usefulness of its various components.

2.3 Procedure

Prior to recruitment, approval to conduct this study was obtained from the Human Research Ethics Committee at the University of NSW. During the course of the study approval was also received from the NSW Department of Education to recruit for the study directly from public schools in the Sydney area. Further ethics clearance was obtained from the Wentworth Area Health Service ethics committee to recruit for the study via local AOD services.

Details of referral procedures were included in discussions with all potential referral sources, and in all advertising and media exposure of the Check-up. Staff at agencies that were considered potential referral sources were provided with a list of eligibility criteria. It was noted that the Check-up was able to accept referrals for both concerned others and/or young people in the first instance.

When a concerned parent contacted project staff by telephone, they were screened to establish their eligibility and given a thorough description of the aims and content of the study. If interested, an appointment was made for a face-to-face CO session. Prior to beginning the session the COs questions were answered and informed consent was obtained. Contact details for follow-up purposes were collected. Following the session, if nothing was heard from the CO for two weeks the project clinician contacted them to ask if they had spoken with their young person about the project and, if so, were they interested.

When a young person was referred to the project they were screened for eligibility (by telephone or in person), and the study was fully explained to them. At the first face-to-face session any questions or concerns they raised were addressed and informed consent was obtained. Contact details were collected. The assessment was carried out and an appointment scheduled for the

feedback session. At the completion of the feedback session, young people who met criteria for cannabis abuse or dependence were offered participation in a RCT of a single session of CBT skills/strategies for controlling cannabis use. Eligible participants were randomly allocated to immediate treatment or to a three month delayed treatment waitlist. Another appointment was made to see the immediate treatment group. All but three participants in the study were seen by the same clinician.

Three months after their last session with the project the young person was followed up by an independent research assistant. This interview was conducted in person and gathered relevant outcome data for the study including quantity/frequency of cannabis and other drug use; stage of change; criminal involvement; psychosocial functioning; urinary cannabinoid level; cannabis use diagnostic status; risk perception; and satisfaction with various aspects of treatment. Those participants in the delayed treatment control group were offered the CBT skills session.

At three months post treatment COs were also followed up, whether or not their young person had participated in the Check-up. If the young person had participated, the COs were asked about what changes, if any, they had noticed and how satisfied they were with their experience of the Check-up.

At six months post-treatment further follow-ups were conducted with all participants.

2.3 Data analysis

The data presented below (see Section 4) provide a description of the sample followed by an analysis of outcome and process measures. For continuous variables, the mean, standard deviation and range are reported if the data are normally distributed, and the median and range if the data are skewed. For categorical data, the number and percentage in each category are reported. The basic inferential analyses presented include parametric (paired sample t tests; ANOVA) and non-parametric tests (Wilcoxon Signed-Rank tests) as appropriate to the characteristics of the data. The analyses include only those participants from whom follow-up data were collected; there was no imputation of missing data. Further more complex analysis of the data is planned for future publications.

3. RECRUITMENT

3.1 Eligibility criteria

3.1.1 Concerned others

Concerned others may be parents, other family members, teachers, counsellors, or any other person who has contact with a young person who uses cannabis. To be eligible to participate concerned others were required to fulfil the following criteria:

- the cannabis use of a young person must be their primary presenting concern;
- they must show no evidence of a medical condition, or cognitive or psychological impairment that would interfere with their ability to participate (e.g. an acute psychotic condition or profound intellectual disability); and
- fluency in English.

3.1.1 Adolescents

The eligibility criteria for adolescents were kept reasonably liberal in an attempt to recruit a range of young cannabis users that would reflect the diversity of this group as it exists in the community (e.g. a range of levels of cannabis and other substance use; non-treatment seekers and treatment seekers; young people with moderate, controlled co-morbid disorders). The young person must:

- be aged 14-19 years;
- have used cannabis at least once during the past 30 days;
- have consumed fewer than 80gms of alcohol per day in the past 90 days;
- have not engaged in more than weekly injecting drug use in the past 90 days;
- have used other illicit drugs no more than twice weekly on average in the past 90 days;
- have no significant cognitive or psychological impairment that would interfere with their ability to participate (e.g. an acute psychotic condition or profound intellectual disability);
- be fluent in English; and
- have not received any treatment specifically related to cannabis use in the past 90 days.

3.2 Recruitment sources and issues

Various recruitment methods were used in an attempt to attract a diverse sample. In addition to liaising with a range of organizations to set up formal recruitment arrangements, project staff spent considerable time presenting the project to interested community groups such as school counsellor groups, youth workers, treatment agencies, teachers and other school staff. Although the project was generally greeted with enthusiasm at these presentations, in many cases few referrals were forthcoming. In the case of schools and youth work groups, successful referrals to the study were the result of the dedication and motivation of particular individuals who were interested in supporting the project. Being outside the existing systems made recruitment from these sources more challenging and relied on gatekeepers within the system to provide access to potential participants. Similarly, a treatment agency with which we established formal links initially provided a flow of referrals but this slowed once the agency developed and started its own group-based intervention programmes.

Despite the nominal support of the Department of Education, there were considerable difficulties attempting to get the study established in schools. Some appeared concerned about the illegality of cannabis use and the accompanying privacy issues with young people potentially being identified as users. While far from insurmountable such issues seem to have been sufficient to dissuade some schools from becoming involved with the project.

The most fruitful source of referrals was media exposure. This came in the form of paid advertisements, articles in newspapers and magazines, interviews with project staff on radio, and the internet. Well in excess of 300 people (including treatment providers, researchers and other clinical staff) contacted project staff during the recruitment period; 178 completed screening and 135 were eligible to participate.

4. RESULTS

For the recruitment period April 1, 2001 to September 2003, 109 eligible family groups were inducted into the study, comprising 73 young people and 62 concerned others.

4.1 Sample characteristics: Concerned others

As expected, the majority of concerned others (CO) who met eligibility criteria for the study were parents (n=72/75; 96%). Most cited the media as their source of referral to the study (n=33; 44%), followed by AOD agencies (n=20; 26.7%) and friends/relatives (n=7; 9.3%).

Sixty two of the eligible concerned others chose to participate in the CO session; others chose to speak with their young person without the CO session, or were unsure about participating in the project. The areas of concern endorsed by the participants about their young person's cannabis use are presented in table 1.

Table 1: Concerns regarding young person cannabis use

	n (%)
Level of use	62 (100%)
Mental health/behaviour	62 (100%)
Family issues	47 (75.8%)
School/academic performance	40 (64.5%)
Physical health	37 (59.7%)
Legal issues	24 (38.7%)
Cognitive issues	23 (37.1%)

n=62

Along with the universal concerns about level of use and mental health, almost all the participants (n=60; 96.7%) stated they were “moderately” or “very” concerned about their young person's cannabis use. Although more than half (n=32; 51.6%) had been concerned for at least a year, only a minority (n=24; 38.7%) had ever sought help before. This previous help-seeking most commonly involved speaking with a general practitioner.

When questioned about their own cannabis use history, one third (n=20; 32.8) of COs reported they had never used. More than half (n=34; 55.7) were ex-users, and one in ten (n=7; 11.5%) identified themselves as current users.

The majority considered their young person's cannabis use to be either “a problem” (n=28; 45.2%) or in need of treatment (n=27; 43.5%). In contrast, most believed that the young person themselves did not view their own use as a problem (n=34; 54.8%). General communication problems were also evident, with 40.3% of COs stating that they either “don't talk” or communicate “not well at all” with their young person.

When asked what they would most like to gain from participation in the Check-up, the most commonly endorsed goals were reduction/cessation of the young person's cannabis use (n=35; 56.7%) and improvement in the young person's mental health and/or behaviour (n=16; 19.4%).

The CO session appeared to a useful and successful addition to the Check-up design, with 59.4% (n=41/69) of the COs who participated in the project able to recruit their young person

also to participate. Given the relatively poor rate of direct referral of young people from other sources (e.g. schools, counsellor groups), the role of parents in recruitment has been critical.

4.2 Sample characteristics: Young people

4.2.1 Compliance

There was a high level of treatment compliance in the core Check-up, with 90.4% (66/73) of participants completing both the baseline assessment and feedback sessions. Of those individuals who did not return for the feedback session, two cited work/time commitments for their inability to continue; two could not be contacted; one had moved into long-term residential treatment; and one stated he had stopped using cannabis on his own and no longer required the feedback session. The capture rate for the RCT was considerably lower with 59% of eligible young people (41/69) choosing to participate in the strategies sessions. The most commonly cited reasons for non-participation were variants of “it’s not necessary for me” and “I’ll try on my own first”.

4.2.2 Source

The sample was recruited from a wide variety of sources including treatment agencies, schools and school counsellors, GPs, youth-work agencies, Juvenile Justice offices, via media advertisements and interviews, and through presentations by project staff to interested community groups. As expected the majority of young people were referred to the Check-up by their parents (n=50; 68.5%), other relatives/partners (n=5; 6.8%), or schools (n=10; 13.7%). A number of young people, however, identified themselves as “self-referred” (n=9; 12.3%).

When asked to identify their main reason for attending the Check-up the majority stated they were asked/coerced by parents or school (n=39; 53.4%). Other reasons included: to help with research, or curiosity (n=15; 20.5%), to gain more knowledge (5; 6.85), and wanting to control their use (n=8; 11%).

4.2.3 Demographics

The main demographic characteristics of the sample of young people, the majority of whom were male (n=56; 76.7%), are listed in Table 2. On average, participants were 16 years old (mean=16.4, sd=1.5, range=14-19). The majority of participants were Australian-born and English speaking, and lived at home with their parent(s). Most were still at school or studying elsewhere (n=46; 63%) or in fulltime employment (n=10; 13.7%). A small minority were currently unemployed (n=6; 8.2%). There are no indigenous Australians present in the sample.

Table 2: Demographic characteristics of the sample

	n (%)
Gender	
Male	56 (76.7)
Female	17 (23.3)
Country of birth	
Australia, non-indigenous	59 (80.8)
Australia, indigenous	0 (0)
overseas (Colombia, Chile, Russia, NZ, Thailand)	14 (19.2)
Main language spoken	
English	68 (93.2)
other	5 (6.8)
Living situation	
parent(s)	62 (84.9)
other relatives	3 (4.1)
partner	2 (2.7)
other (boarding school, refuge, supported accommodation)	4 (5.5)
Education*	
still at school	40 (54.8)
studying elsewhere	6 (8.2)
Employment*	
full-time employment	10 (13.7)
part-time/casual employment	32 (43.8)
unemployed	6 (8.2)

*n=73

4.2.4 Cannabis Use

The mean age of first cannabis use was 13.2 years (sd=1.7; range=9-17 yrs). The majority of participants (80.8%) reported having used on a daily or near daily basis at some time, with this pattern of use beginning on average at age 15 years (sd=1.4; range=12-18).

Recent and current cannabis use patterns are summarised in Table 3. Participants varied widely in their reported quantity and frequency of cannabis use, with a mean of 55/90 using days (range=2-90), and an average consumption of 465 cones (sd=466; range= 9-2145) in the 90 day period. This equates to a mean weekly intake of 37.4 cones (sd=36.8; range=0.7-167). The number of hours spent stoned on a typical day was 4 with a range of 0.45 to 10 hours. The overwhelming majority of participants (94.5%) obtained their supply from friends or acquaintances, spending a mean of \$50.7 (sd=41.7; range: \$0-175) per week. Most (90.4%) rated it “very easy” or “easy” to get cannabis. As one would expect, the measure of carboxy-THC (microg/L) derived from urinalysis (mean=774.6; sd=893.4; range=0-3880) correlated significantly ($r=.358$, $p<0.05$) with self-reported level of use in the past 30 days, which lends credence to the accuracy of self-report.

Less than half of the participants (43.8%; n=21)) were in Pre-contemplation or Contemplation Stages of Change. The remainder were preparing to make changes to their use (26%; n=19), currently doing so (26%) or had recently done so (4.1%; n=3). Of those who were currently making changes or had recently done so (n=22), the majority (59.1%) were satisfied with their current level of use and the remainder were contemplating (27.3%;n=13) or preparing (13.6%; n=3) to make further changes.

Participants' ratings (on a scale of 0-10) of their current aims regarding cannabis use reflect some ambivalence. They believed that continuing their current level of use was "somewhat important" (median=5) but were also "somewhat" (median=6) interested in reducing or stopping use. They rated the importance of reducing or stopping in general slightly higher (median=7) and were reasonably confident (median=7) that they could reduce or stop today if they tried.

More than three quarters (79.5%) reported having stopped or decreased their cannabis use at some time in the past, a median of twice. The longest period of reduced use or cessation since becoming a regular user, however, was a median of just 21 days.

Table 3: Recent and current cannabis use patterns

	n (%)
Use in last 90 days (n=71)	
Mean days used (sd)	55 (28.5)
Pattern of use:	
daily	10 (14.1)
3-6 times/wk	53 (71.8)
weekly or less	7 (9.9)
Use in last 30 days (n=73)	
Mean days used (sd)	21.5 (30.9)
Pattern of use:	
daily	14 (19.2)
3-6 times/wk	27 (63)
weekly or less	12 (16.4)
Source	
grow own	3 (4.1)
street dealer	15 (20.5)
friend/acquaintance	69 (94.5)
parent	1 (1.4)
Stage of Change	
Pre-Contemplation	11 (15.1)
Contemplation	21 (28.8)
Preparation	19 (26.0)
Action	19 (26.0)
Maintenance	3 (4.1)
Quitting/reducing use	
ever	58 (79.5)
last 3 mths (n=58)	24 (41.4)

n=73

4.2.5 Cannabis dependence and problems

4.2.5.1 Cannabis use disorders

The great majority of the sample (94.5%) met DSM-IV diagnostic criteria for a cannabis use disorder (see Table 4). Cannabis dependence was diagnosed in 79.5% of participants and cannabis abuse in 15%. A mean of 4.6/7 (sd=2.2; range=0-7) dependence criteria and 1.5/4 (sd=1.0; range=0-4) abuse criteria were reported, with 5.5% having no diagnosis and 1.4% (n=1) reporting no symptoms. The average score on the Severity of Dependence Scale (SDS) was 5.7 (sd=3.4; range=0-13), indicating some concern among these young people about their own

cannabis use. Using a cut-off score of 3 on the SDS to indicate probable cannabis dependence (see Swift et al., 1998) this measure also classified the majority (83.6%) of young people as dependent.

Table 4: Cannabis dependence and abuse

	n (%)
DSM-IV diagnosis	
Any cannabis use disorder	69 (94.5)
dependence (3+ criteria)	58 (79.5)
abuse (1+ criteria)	11 (15.0)
no diagnosis	4 (5.5)
Severity of Dependence Scale	
<u>In the last 3 months ...</u>	
1. Thought their use was out of control (at least sometimes)	47 (64.4)
2. Anxious at thought of missing a smoke (at least sometimes)	54 (74.0)
3. Worried about their cannabis use (at least a little)	60 (82.2)
4. Wished they could stop (at least sometimes)	49 (67.1)
5. Difficulty in stopping/going without (at least quite difficult)	51 (69.9)
Dependent (Score of 3+)*	61 (83.6)

*The cut-off score of 3+ was derived from a sample of long-term using adults (Swift et al, 1998), so may not apply to this group.

4.2.6 Other Drug Use

Other than cannabis, alcohol and tobacco were the most commonly used drugs among this group (see Table 5). Alcohol use patterns varied widely between participants with a mean of 12.8 (sd=19; range=0-90) drinking days in the past 90, and a mean of 5.2 standard drinks (sd=2.9; range=1-12.5) per drinking occasion. Binge drinking was common with 42.5% of the total sample reporting consuming 6 or more standard drinks on a typical drinking occasion. With the exception of amphetamine and ecstasy, which were each used by more than a third of the sample in the past 90 days, these young people were not likely to use other illicit drugs and if they did so, use was typically irregular. Two participants reported experience of injecting drug use “ever”, but none had done so in the past 90 days.

Table 5: Other drug use in the past 90 days

	n (%)
alcohol	70 (95.9)
tobacco	62 (84.9)
opiates	1 (1.4)
amphetamine	31 (42.5)
cocaine	7 (9.6)
benzodiazepines	3 (4.1)
hallucinogens	2 (2.7)
ecstasy	27 (37.0)
inhalants	1 (3.4)

4.2.7 Legal issues

When asked about their criminal activity in the past 90 days, this group reported considerable criminal involvement. In the past 90 days almost two thirds (n=46/72; 63.9%) had been involved in illegal activities (other than illicit drug use) on at least one day. One third (n=24/72; 33.3%) reported supporting themselves financially for at least some time in the past 3 months through illegal activities. The type of criminal activity reported was typically property crime or cannabis dealing.

4.2.8 Health

When asked to provide a self-rating of their health in the last three months, the majority of young people reported they were in “good” (51.4%) or “fair” health (20.8%). Only 11.1% rated their health as “very good” or “excellent” (see Table 6). More than half (54.9%) had been recently bothered by health problems. These complaints were typically respiratory, of a few days duration, and rarely prevented them from meeting their responsibilities. About one third (31%) reported consulting a medical practitioner in this time.

Half of the sample (50.8%) reported a lifetime history of treatment for a psychological, emotional, or behavioural problem. A minority (15.9%) were currently receiving treatment, including the prescription of stimulant medication, anti-depressants and anti-psychotics. Almost one fifth (19.2%) said they had received a diagnosis of attention deficit hyperactivity disorder (ADHD) at some time from a doctor or mental health professional (see Table 6).

Table 6: Physical and mental health status of participants

	n (%)
Self-rating of health in last 3 months ⁺	
excellent	3 (4.1)
very good	5 (6.8)
good	37 (50.7)
fair	15 (20.5)
poor	12 (16.4)
Bothered by medical problems in last 3 months [#]	32 (43.8)
Saw doctor/nurse in last 3 months [#]	41 (57.8)
Ever received treatment/medication for psychological problem [*]	35 (50.7)
Currently receiving psychiatric medication [*]	11 (15.9)
Ever been diagnosed with ADHD ⁺	14 (19.2)

⁺n=72; [#]n=71; ^{*}n=69

4.2.9 Social/family issues

The mean score on the Family Assessment Device was 2.2 (n=67; sd=0.54, range=1.08-3.67). As scores on this instrument can range from 1 (healthy functioning) to 4 (unhealthy functioning), this group reported quite a healthy relationship, overall, with their immediate family. Even so, familial conflict was common with three quarters (n=53/69; 76.8%) reporting verbal abuse, serious argument or violence with their relatives at least “sometimes” in the last three months. The rate of conflict with relationship partners was considerably lower (n=8/24; 30.8%), and of those involved in school or work half reported conflict in these environments (n=32/64; 50%).

Money problems, including arguing about money or not having enough for food or housing were reported by more than half (n=41/71; 57.7%) the participants as occurring at least “sometimes” in the last three months. While the majority (n=52/71; 73.2%) did not live with an

illicit drug user in the past three months, a substantial minority reported spending “none of the time” with non-drug-using friends (n=18/71; 25.4%).

4.3 Outcome at three month follow-up

Of the baseline sample of 73 young people, 54 were successfully followed up at three months, giving a follow-up rate of 74%. The mean length to follow-up was 117 days (sd=20; range=88-175). Outcome data for this group are presented below. The alpha level for statistical significance level is $p < 0.05$ for planned comparisons.

Paired samples t-tests were conducted on cannabis consumption measures and revealed significant reductions in both quantity and frequency of use from baseline to 3-months. Days using cannabis in the past 90 declined from a mean of 56.6 (sd=28.8) at baseline to 42.6 (sd=35.4) at 3 months, $p=0.003$. Similarly, the mean number of cones used in the past 90 days declined from 512.5 (sd=504.6) at baseline to 358.3 (sd=409.6), $p=0.029$. Positive outcomes were found on a range of range of measures (see Table 7) indicating improvements of both statistical and clinical significance.

Table 7: 90 day follow-up data (n=54)

	%(n)	Mean (sd)
Voluntarily stopped/reduced use for some time in the past 90 days	77.7% (42)	
Total abstinence in past 90 days	16.7% (9)	
Days of cannabis use in the past 90 days		
<i>Baseline</i>	56.6 (28.8)	
<i>Median</i>	59	
<i>90 day</i>	42.6 (35.4)	
<i>Median</i>	36.5	
	$p < 0.05$	
Severity of Dependence Scale (SDS) score		
<i>Baseline</i>	5.9 (3.3)	
<i>90 day</i>	4.7 (3.5)	
	$p < 0.05$	
Cones used per week		
<i>Baseline</i>	39.6 (38.9)	
<i>90 day</i>	27.5 (31.7)	
	$p < 0.05$	
DSM-IV Cannabis Use Disorder diagnoses		
Any CUD	64.8%	<i>Baseline</i> 94.5%
Dependence	48.4%	<i>Baseline</i> 79.5%
Abuse	16.6%	<i>Baseline</i> 15.0%
Nil	35.2%	<i>Baseline</i> 5.5%
Number of cannabis dependence symptoms		
<i>Baseline</i>	4.9 (1.9)	
<i>90 day</i>	2.9 (2.0)	
	$p < 0.001$	

As shown in the above table, more than three quarters (77.7%) of the follow-up sample reported voluntarily reducing or stopping their cannabis use at some time during the follow-up period. This is consistent with the significant reductions found in days of use and quantity of use. The clinical significance of these reductions is evident in the changes relating to DSM-IV dependence. While the proportion of participants receiving a diagnosis of cannabis abuse remained fairly stable between baseline (15.0%) and follow-up (16.6%), there was a marked drop in the proportion receiving dependence diagnoses (94.5% to 64.8%). Significantly fewer dependence criteria were endorsed at follow-up (2.9) than at baseline (4.9). Given that a DSM-IV diagnosis of dependence requires the presence of at least 3 of 7 symptoms, the mean number reported at follow-up (2.9) indicates an influence on diagnostic status, and reflects a reduction in dependence symptomatology that is both statistically and clinically significant. Further evidence of this improvement is provided by the SDS score which also shows a significant reduction in severity of dependence.

Some aspects of general social functioning, as measured by the Brief Treatment Outcome Measure (BTOM), also showed improvement. There was a significant reduction in the frequency of family conflict ($z = -3.35, p < 0.001$) and fewer reports of serious financial problems ($z = -2.57, p < 0.01$). Measures of satisfaction (on a five point Likert scale) also showed significant improvement (see Table 8); satisfaction with family relationships and satisfaction with sexual relationships increased (both $p < 0.001$), as did satisfaction with school/work performance, accommodation, and current personal coping and support (all $p < 0.05$). Despite the increased satisfaction with family relationship and reduced conflict, general family function as assessed by the Family Assessment Device failed to show a significant improvement ($t = 1.63, p = 0.109$), possibly as a result of a low baseline level of family dysfunction. Even so, a pattern of improved psycho-social functioning emerges from the other measures.

Table 8: Life satisfaction of participants (on a five point scale)

	Baseline	90 Day follow-up
Satisfaction with family relationships	2.36	3.54 ⁺⁺
Satisfaction with work/school situation	2.21	3.28 ⁺
Satisfaction with accommodation	3.0	3.96 ⁺
Satisfaction with sexual relationships	2.75	4.33 ⁺⁺
Satisfaction with current level of coping and support	3.01	3.61 ⁺

⁺ $p < 0.05$; ⁺⁺ $p < 0.001$

4.4 Outcome at six month follow-up

Forty six participants were followed up six months after their last participation in the Check-up, giving a follow-up rate of 63%. The general trend of reduced cannabis use and associated problems found at the three month follow-up was also evident at six months. Key measures including the number of days of use in the past 90 days, and the number of reported dependence

symptoms remained significantly reduced from baseline. Some reductions, however, were no longer statistically significant; possibly due to the lower power afforded by the smaller n at this follow-up point (see Table 9).

Table 9: 180 day follow-up data (n=46)

	%(n)	Mean (sd)
Total abstinence in past 90 days	15.6% (7)	
Days of cannabis use in the past 90 days		
<i>Baseline</i>	54.7 (30.9)	
<i>Median</i>	59	
<i>90 day</i>	43.5 (34.2)	
<i>Median</i>	45	
	p<0.05	
Severity of Dependence Scale (SDS) score		
<i>Baseline</i>	5.4 (3.4)	
<i>90 day</i>	4.4 (3.3)	
	p=0.09; ns	
Cones used per week		
<i>Baseline</i>	38.4 (39.8)	
<i>90 day</i>	28.4 (30.5)	
	p=0.095; ns	
DSM-IV Cannabis Use Disorder diagnoses		
Any CUD	63.0%	<i>Baseline</i> 94.5%
Dependence	50.0%	<i>Baseline</i> 79.5%
Abuse	13.0%	<i>Baseline</i> 15.0%
Nil	37.0%	<i>Baseline</i> 5.5%
Number of cannabis dependence symptoms		
<i>Baseline</i>	4.3 (2.2)	
<i>90 day</i>	2.6 (2.2)	
	p<0.001	

4.5 Acceptability of Check-up

The Check-up was very well received by the participants. Confidential participant satisfaction reports were completed following the feedback and strategies sessions. These confirmed the non-judgmental nature of the intervention and the perceived value of discussing cannabis use, receiving feedback on use and comparison to norms, and learning skills to assist moderation of use or cessation.

Table 10 illustrates some of the positive ratings received from the 65 young people who participated in the feedback session and also completed the evaluation forms. Similar ratings were provided by the participants in the strategies session.

Table 10: Young person’s evaluation of the feedback session (n (%))*

	Strongly agree	Agree	Don’t know	Disagree	Strongly disagree
I felt comfortable talking with my counsellor	32 (49.2)	33 (50.8)	0	0	0
The session gave me a new way of looking at my cannabis use	14 (21.5)	27 (41.5)	17 (26.2)	5 (7.7)	2 (3.1)
My counsellor understood me and my feelings about my cannabis use ⁺	23 (35.9)	32 (50)	9 (14.1)	0	0
The counsellor genuinely cared about me as a person	17 (26.2)	30 (46.2)	18 (27.4)	0	0
The counsellor appreciated my coming in for the session	30 (46.2)	28 (43.1)	7 (10.8)	0	0
The counsellor listened to what I had to say	43 (66.2)	22 (33.8)	0	0	0
The counsellor tried to convince me to quit using cannabis	2 (3.1)	8 (12.3)	13 (20.2)	25 (38.5)	17 (26.2)
The counsellor was judgmental of me and my attitudes towards my use of cannabis	2 (3.1)	2 (3.1)	7 (10.9)	20 (31.3)	33 (51.6)
My meeting with the counsellor was a waste of time	0	0	7 (10.8)	23 (35.4)	35 (53.8)

*n=65 ⁺ n=64

In addition, high levels of satisfaction were reported with other aspects of the feedback session, including the length of the session (68% satisfied, 28% neutral), the clinician (98.5% moderately or very satisfied; 96.9% described the clinician as moderately or extremely helpful), and receiving feedback on their cannabis use and its consequences (86.9% believed it was helpful; 10.8% neutral). None of the participants (0%) agreed with the statement that the feedback meeting was a “waste of time”. Three quarters (74.6%) said they would be interested in more meetings to further discuss their cannabis use, if such meetings were available.

Similar positive satisfaction ratings were obtained for the strategies session with large majority endorsements of feeling comfortable, being listened to, not feeling judged, and learning a new way of looking at cannabis use. The majority were also satisfied with the length of the session and all were satisfied with the clinician. Filling out the strategies workbook and discussions on cannabis dependence, high-risk situations, craving, relapse prevention, and goals were rated as moderately or extremely helpful by the majority (94.1% - 100% in all cases). Again almost three quarters (71.5%) stated that they would be interested in further meetings.

The reaction of concerned others to the Check-up was also very positive. When asked to rate their satisfaction with the Check-up three months after their participation 83.3% (n=55) stated they were either “moderately” or “very” satisfied. Further, 67.4% rated their involvement in the Check-up as “moderately” or “extremely” helpful.

4.6 Randomised controlled trial: single session CBT

A randomised controlled trial (RCT) of a single session of cognitive behavioural skills training was included in the study in addition to the core Cannabis Check-up. This RCT tested the effectiveness of brief CBT compared to a delayed treatment control condition in reducing cannabis use and cannabis-related problems among young people with a current cannabis use disorder. This design gave an opportunity to examine whether brief training in skills/strategies for reducing cannabis use would add any additional benefit in outcomes to participating in the Check-up alone. It was hypothesised that participants in the CBT group would show greater reductions in use, fewer cannabis use disorder symptoms, and fewer associated problems at the three month follow-up than the delayed treatment group.

To be eligible to participate in the trial the Check-up participants were required to meet diagnostic criteria for a current diagnosis of cannabis abuse or dependence. Of the 69/73 who met these criteria 41 agreed to randomisation, and 29 were not interested or stated they did not have time to participate. Twenty one were allocated to the CBT condition and 20 to the wait-list. Data on the individual's current cannabis-related problems (see Table 11) were collected using the Cannabis Problems Questionnaire; a multi-dimensional instrument that is currently undergoing psychometric evaluation by project staff. It can be seen that problems were reported in various domains of functioning including cognitive function, relationships, educational/occupational performance, mental and general health. Particularly prominent were difficulties with motivation, concentration, low energy levels, and paranoia; all of which were endorsed by at least three quarters of the participants.

Table 11: Selected items from the Cannabis Problems Questionnaire endorsed by RCT participants

Selected item from the Cannabis Problems Questionnaire	% (n) RCT participants
Friends complaining about your smoking	47 (17)
Partner has threatened to leave because of smoking	42 (6)
Complaints from teachers about your work	58 (18)
Gone to classes stoned	74 (23)
Had less energy than usual	81 (29)
Felt less able to concentrate than usual	78 (28)
Gone to work stoned	63 (12)
Been worried about the amount of money you have been spending on cannabis	64 (23)
Been in trouble with the police	28 (10)
General health been poorer than usual	69 (25)
Persistent chest infection/cough	47 (17)
Driven stoned	31 (11)
Feeling paranoid or anti-social after smoking	75 (27)
Concerned about lack of motivation	81 (29)
Worried about feelings of personal isolation or detachment	53 (19)

Key outcome measures were examined by repeated measures analysis of variance (ANOVA) to determine whether significant differences existed between the CBT and wait-list conditions at three month follow-up. The group means for each variable in the analysis are presented below (see Table 12). It should be noted that the analysis included only those participants for whom complete data were available, leaving a final sample size for the analysis of n=32; fifteen in the wait-list condition and 17 in the CBT group.

As expected, the within subjects comparisons (baseline compared with follow-up measures for each variable) showed significant improvement ($P < 0.05$) on all variables included in the analysis. That is, for the RCT sample as a whole there was a significant reduction in quantity and frequency of cannabis use, and a decrease in the number and severity of dependence symptoms. This is a reflection of the improvement found in the larger study population following the Check-up.

The data in Table 12 show mean differences between the groups but the between subjects comparisons (CBT group compared with wait-list group) in the ANOVA did not show these differences to be significant. Given the limited sample size, however, there is a clear possibility of type 2 error in the failure of between group differences to achieve significance. There is some consistency in the direction of differences between groups; the quantity and frequency of use measures and, importantly, the number of dependence symptoms reported are all lower in the CBT group than the wait-list group. This direction of difference is what would be expected if the

CBT added an additional effect to outcome. The exception to this trend is the total SDS score, which is (non-significantly) higher for the CBT group. The SDS score provides an index of dependence severity based on an individual's level of awareness and concern about their current substance use and their ability to control it. This may explain the apparent discrepancy between the lower number of dependence symptoms reported and the higher SDS score in the CBT group relative to the wait-list condition. It is possible that participants in the CBT group developed a greater level of problem awareness than wait-list participants and this is reflected in a relative elevation of SDS score.

To the extent that increased problem recognition plausibly accounts for differences in SDS score, the pattern of group differences in Table 12 is consistent with a possible type2 error resulting from lack of statistical power to detect differences.

Table 12: 90 day outcome measure means by RCT group

	CBT	Waitlist
Days used cannabis in the last 90 (sd)	35.94 (36.05)	47.69 ⁺ (33.54)
Mean cones used per week in the last 90 days (sd)	24.91 (33.57)	33.96 ⁺ (35.0)
Number of dependence symptoms (sd)	2.40 (2.16)	3.29 ⁺ (1.82)
Mean SDS score (sd)	5.41 (3.78)	4.67 ⁺ (3.16)

n=32 ⁺ p>0.05;ns

5. DISCUSSION AND CONCLUSION

The principal aim of this study was to assess the effectiveness of a brief intervention for young people who use cannabis. It has been reported that more than 34% of Australians aged 14-19 years have ever used cannabis and about one in ten of this group use it at least weekly. The population prevalence of cannabis dependence among 18 year old males is approximately 8%. Despite apparent widespread cannabis use and dependence there are few available treatment options which specifically target young cannabis users. This study is an attempt to broaden the base of options available and respond to unmet need.

The approach taken in this research builds on earlier brief intervention research including the Drinker's Check-up (Miller & Sovereign, 1989) and the adult Cannabis Check-up (Copeland et al., 2001), both of which were demonstrated to be effective in promoting behavioural change.

The overall approach of the Check-up is non-judgemental and non-coercive. This allows the Check-up to target a non treatment seeking population. While some young people are ambivalent about their cannabis use, many are not, and some haven't given the matter much thought. As the Check-up does not focus on immediate behavioural change (although it actively supports and reinforces intentions to change), it is equally appropriate for young cannabis users who identify their use as possibly problematic and those who do not. It offers young people the chance to explore the role of cannabis in their lives without feeling pressured to change and without being labelled a problematic user.

While many young people do not see their cannabis use as problematic, this view is not necessarily shared by their parents, teachers, and others. The study included a session for concerned parents. This provided an opportunity for parents to express their concerns about their young person and to receive up-to-date information about cannabis use. Discussion of communication skills was included to help parents more effectively express their concerns and encourage their young person to participate in the study. Concerned parents were thus mobilized to assist in the recruitment process. (This makes sense given that young people are typically referred to substance use treatment by third parties, e.g. parents or schools, rather than referring themselves).

The study was designed to be flexible with regard to recruitment and referral. Young people could participate along with their parents; they could refer themselves to the project without parental involvement; or they could be referred by third parties such as teachers or GPs. This made the Check-up accessible to treatment seekers and non treatment seekers alike.

The central aim of the study was to test the effectiveness of the Check-up intervention. To be effective an intervention must be able to attract participants, retain them in treatment, provide significant improvements on outcome variables, and be acceptable to the intervention participants. The above data show the Check-up to have been successful in each of these areas.

The study was able to attract participants, albeit in lower numbers than originally anticipated. Several recruitment challenges emerged during the study including overcoming institutional obstacles, and the ongoing need to reinforce to some potential referral sources that "research" and "intervention" are not mutually exclusive categories. Difficulties establishing the project in schools were never adequately resolved, despite NSW Department of Education support. There appeared to be concern within at least one school that involvement with the project would reflect badly on the school's reputation by inferring the school had a "drug problem". Issues of

the illegality of cannabis and the possibility of participants being identified were also matters of concern for some schools. From the schools that gave in-principle support to the project few referrals were received, and those that were came from particular motivated individuals within the school system.

The notion that the Check-up was somehow “just research”, rather than an intervention that was being researched, was at times a difficult one to dispel. In this sense the word “research” is seemingly thought to connote something that is purely exploratory and descriptive; data gathering only, rather than anything practical and interventionist. A specialist telephone referral service persisted in categorising the Check-up as simply research (rather than an intervention) despite formal presentations and several discussions with staff regarding the nature, aims and content of the Check-up. Perhaps as a result of this we received just two successful referrals of concerned others from this source throughout the course of the study. This misunderstanding is unfortunate both for the researchers and for concerned parents looking for assistance.

Nevertheless, although we did not have ready access to the two referral sources we originally expected to be the most fruitful (i.e. schools and the telephone referral service) the project still succeeded in attracting participants from other sources and by other means. The provision of an in-person session for concerned parents proved a useful addition to the basic Check-up model; 60% of concerned parents who took part in a CO session were successful in persuading their young person to participate in the Check-up. It is clear from follow-up data that the majority of COs were satisfied with the CO session and considered it helpful. To assist families to communicate their concerns more effectively and encourage their young person to participate in the project was one of the aims of the study, which appears to have been achieved - at least in part. A 60% rate of successful recruitment in the face of likely resistance from the young people seems a very good outcome. It is also noteworthy that for the great majority of COs the Check-up was the first time they had sought assistance or advice regarding their young person’s cannabis use, despite having been very concerned for an extended period of time. The Check-up provided something they had been unable to find elsewhere. It also proved acceptable to young people and able to retain them; with a Check-up retention rate of over 90%.

The high rate of recruitment by parents is perhaps all the more surprising given the characteristics of the sample of young people. The study attracted a group of young people with a considerably more complex clinical profile than we anticipated. They had very high rates of cannabis use disorder, particularly dependence, and high rates of co-morbid psychopathology such as previously diagnosed ADHD, conduct disorder, depression, and currently controlled psychosis.

Despite the very high rate of cannabis dependence in the sample, the results of the main outcome analyses are extremely promising. Three quarters of the sample (78%) reported voluntarily reducing or stopping their cannabis use during the 90 days to follow-up, and 16.7% reported total abstinence during this time. In addition, significant reductions were found on measures of both quantity and frequency of use. These reductions in use were reflected in changes in levels of cannabis dependence, with a marked drop in the proportion of the sample meeting criteria for dependence, and a significant reduction in the numbers of dependence criteria being endorsed by participants. The magnitude of the changes in dependence symptomatology demonstrates that the reductions reported are of both statistical and clinical significance. Such positive results are particularly encouraging given the brevity of the intervention and the severity of cannabis-related problems evident at baseline.

In addition to improvements on measures specific to cannabis, improvements were seen in other areas of general functioning. A significant reduction in family conflict was noted, as were fewer financial difficulties. There was also increased satisfaction with family relationships, school or work performance, and level of personal coping. These improvements could plausibly be associated with reductions in problematic cannabis use, and diminished impact of cannabis use on general functioning.

The reductions in days spent using cannabis and the number of dependence symptoms reported at 90 day follow-up were still present and significant at 180 day follow-up. That is, the effect on these variables was maintained six months post intervention. Other main outcome measures, including mean number of cones consumed per week and total SDS score, were reduced from baseline but the differences were now no longer significant. That these differences failed to reach significance may be a result of inadequate statistical power to detect significance with the sample size available at the six month follow-up point. The consistent direction of the observed differences (i.e. reduced from baseline) is consistent with this possibility.

Difficulties with statistical power also complicate the interpretation of results from the RCT of a single session of CBT skills training versus a wait-list control. The observed differences between the groups did not reach statistical significance. The sample size (n=33) for this analysis, however, would require a very large effect size to be present before it would be adequate to detect group differences. The CBT group does appear to have reduced quantity/frequency of use and fewer dependence symptoms than the wait-list group, but this is difficult to interpret in the absence of significance.

Given the experimental design used in the study (pre-test, post-test) it is not possible to draw causal inferences about the influence of participation in the Check-up on the changes seen in outcome variables. This design cannot answer the question of whether these changes would have occurred purely as a result of the passage of time, or as a result of some other extra-therapeutic factor. The next stage in the evaluation of the Check-up is to subject it to a randomised controlled trial. The current feasibility study has produced extremely encouraging results; it has established that the Check-up can attract participants, retain them, is acceptable to them, and is associated with improved outcomes. Now a more rigorous design is required to demonstrate that participation in the Check-up is causally related to reductions in quantity/frequency of cannabis use and cannabis-related problems. This next phase has received NH&MRC funding and the expanded study has commenced recruitment.

The results presented in this report indicate the considerable potential of the Check-up approach with young people. This type of intervention is a very efficient approach to secondary prevention. The time and resource requirements are relatively small, the demands on participants are limited, and the intervention can be tailored for use with individuals who have varying levels of cannabis use and associated problems. It could be used opportunistically in environments such as juvenile justice services or schools where cannabis use may commonly arise as an issue.

There is considerable scope for developing the Cannabis Check-up paradigm and disseminating it more widely. Three developments in particular suggest themselves. Firstly, a version specifically designed to be implemented in schools could be developed with the assistance of education professionals. It would need to consider how the intervention could best be accommodated into current school systems, e.g. whether it would be best administered by a school counsellor or as part of a PDHPE curriculum. It could feasibly be incorporated into more generalist alcohol and drug education.

Secondly, the Cannabis Check-up should also be adapted into an Alcohol Check-up for young people. Alcohol is still the most widely used drug among young people and substantial harm accrues due to its use. If an alcohol focussed Check-up could be as successful in the promotion of behavioural change as the Cannabis Check-up appears to be, it could have a significant impact on young people's health and functioning. Implementation of an Adolescent Alcohol Check-up may be less complicated than that of the Cannabis Check-up due to the different legal status of the two drugs.

Part of the Check-up approach is to reorient the focus of treatment to include early and brief intervention. This aims to identify potential problems early by expanding the focus of intervention out from the specialist tertiary alcohol and other drug treatment services and into the community. This approach is pro-active in it's recruitment of people who may not yet be at the point of identifying themselves as definitely having a drug problem. By the time people present to a treatment agency they tend to be sure they have a problem; the Check-up approach tries to provide an option to catch and intervene with the development of problems at an earlier stage. A key to the ability to achieve this is dissemination of the intervention. The third potential development of the Check-up relates to dissemination and access. The Check-up could be developed into a web-based intervention. Delivery via the web has a number of advantages including convenience, 24 hour availability, privacy, and confidentiality. Web-based feedback can be tailored to the individual and presented in an easy to understand and graphically appealing way. An important aspect of a web-based intervention would be its ability to make the intervention available to a wide geographic area. Young people in rural communities would have access to a service that may not be conveniently available in their local area. It is clear that the web could make a significant contribution in the dissemination of an intervention such as the Cannabis Check-up.

The Cannabis Check-up described in this report shows considerable promise and project staff intend to pursue further developments of the Check-up in future studies.

6. Products

Several products were produced by this study. A set of educational resources (the *What's the deal on grass?* series) was developed which contained evidence-based information about cannabis, and a discussion of communication skills relevant to the discussion of sensitive topics such as cannabis use among young people.

Two of these booklets were produced for parents: *What's the deal on grass: Cannabis facts for parents* and *What's the deal on grass: Talking with a young person about cannabis*. A third *What's the deal on grass: Cannabis facts for young people* was written specifically for young people.

The *Cannabis facts for parents* booklet contains an overview of aspects of the literature on cannabis use and its effects, in the form of frequently asked questions. It was designed to provide clear, empirically-based and objective information to parents in a way that is readable and relevant to common concerns.

The *Talking with a young person about cannabis* booklet offers parents practical advice for communicating more clearly and effectively with their young person. It contains a variety of strategies and examples of how each may be implemented.

The *Cannabis facts for young people* booklet was developed to provide easily accessible cannabis information for young people in a format acceptable to them. It covers many of the same questions as the parent's version but the information is presented differently. Considerable time was spent refining the language and presentation of the resource. We consulted widely and conducted a number of focus groups with young people to ensure the content was understandable to them and presented appropriately.

These booklets were developed to meet the needs of the study but they have been popular products and have been widely disseminated to a range of treatment agencies, schools, youth services, and other community groups.

In addition to the educational materials described we also produced a treatment manual (see Appendix A) which provides a detailed description of the study's procedural, administrative, and clinical components. This manual gives a complete account of how the Check-up was implemented as a research study, and provides detailed instructions on how to conduct the clinical components of the Check-up.

8. References

- Arsenault, L., Cannon, M., Poulton, R., Murray, R., Caspi, A. & Moffitt, T.E. (2002). Cannabis use in adolescence and risk for adult psychosis: longitudinal prospective study. *British Medical Journal* 325 1212-1213.
- Australian Institute of Health and Welfare (2002). *2001 National Drug Strategy Household Survey: First results* (Drug Statistics Series No. 9). Canberra: AIHW.
- Australian Institute of Health and Welfare (2003). *Alcohol and other drug treatment services in Australia. Findings from the National Minimum Data Set 2001-02*. Canberra: AIHW.
- Babor, T., Carroll K., Christiansen, K., Kadden, R., Litt, M., McRee, B., Miller, M., Roffman, R., Solowij, N., Steinberg, K., Stephens, R., Vendetti, J., Donaldson, J. & Herrell, J. (2004). Brief treatments for cannabis dependence: finding from a randomised multi-site trial. *Journal of Clinical and Consulting Psychology* 72, 455-466.
- Berguis, J., Swift, W., Copeland, J., Roffman, R.A. & Stephens, R.S. (in press). The Teen Cannabis Check-up. In: R.A. Roffman, & R.S. Stephens (eds.), *Cannabis dependence: Its nature, consequences and treatment* (International Research Monographs in the Addictions). London: Cambridge University Press.
- Brody, J.L. & Waldron, H.B. (2000). Ethical issues in research on the treatment of adolescent substance use disorders. *Addictive Behaviors* 25, 217-228.
- Brook, J. S., Balka, E. B. & Whiteman, M. (1999). The risks for late adolescence of early adolescent marijuana use. *American Journal of Public Health* 89, 1549-1554.
- Byles, J., Byrne, C., Boyle, M.H. & Offord, D.R. (1988). Ontario Child Health Study: Reliability and validity of the General Functioning subscale of the McMaster Family Assessment Device. *Family Process* 27, 97-104.
- Chen, C. & Anthony, J.C. (2003). Possible age-associated bias in reporting of clinical features of drug dependence: epidemiological evidence on adolescent-onset marijuana use. *Addiction* 98, 71-82.
- Chen, K. & Kandel, D.B. (1995). The natural history of drug use from adolescence to the mid-thirties in a general population sample. *American Journal of Public Health* 85, 41-47.
- Coffey, C., Wolfe, R. & Patton, G.C. (2000). Initiation and progression of cannabis use in a population-based Australian adolescent longitudinal study. *Addiction* 95, 1679-1690.
- Coffey, C., Carlin, J.B., Degenhardt, L., Lynskey, M., Sanci, L. & Patton, G.C. (2002). Cannabis dependence in young adults: an Australian population study. *Addiction* 97, 187-194.
- Colby, S.M., Monti, P.M., Barnett, N.P., Rohsenow, D.J., Weissman, K., Spirito, A., Woolard, R.H. & Lewander, W.J. (1998). Brief motivational interviewing in a hospital setting for adolescent smoking: A preliminary study. *Journal of Consulting and Clinical Psychology* 66, 574-578.

- Copeland, J., Swift, W., Roffman, R. & Stephens, R. (2001). A randomized trial of brief cognitive-behavioral interventions for cannabis use disorder. *Journal of Substance Abuse Treatment* 21, 55-64.
- Crowley, T.J., Macdonald, M.J., Whitmore, E.A. & Mikulich, S.K. (1998). Cannabis dependence, withdrawal, and reinforcing effects among adolescents with conduct symptoms and substance use disorders. *Drug and Alcohol Dependence* 50, 27-37.
- Dakof, G.A., Tejada, M. & Liddle, H.A. (2001). Predictors of engagement in adolescent drug abuse treatment. *Journal of the Academy of Child and Adolescent Psychiatry* 40, 274-281.
- Deas, D., & Thomas, S.E. (2001). An overview of controlled studies of adolescent substance abuse treatment. *The American Journal on Addictions* 10, 178-189.
- Degenhardt, L., Lynskey, M., & Hall, W. (2000). Cohort trends in the age of initiation of drug use in Australia. *Australian and New Zealand Journal of Public Health* 24, 421-426.
- Dennis, M. & Babor, T. (2001). *Cannabis Youth Treatment (CYT): Summary of main findings*. Workshop presented at the Annual Meeting of the college on Problems of Drug dependence, Scottsdale, Arizona, June 16.
- Dennis, M., Babor, T., Diamond, G., Donaldson, J., Godley, S., & Tims, F. (1998). *The Cannabis Youth Treatment (CYT) Cooperative Agreement Study*, (SAMHSA/CSAT Grant T111320). Bloomington, IL: Chestnut Health Systems.
- Dennis, M., Babor, T.F., Roebuck, M.C. & Donaldson, J. (2002). Changing the focus: the case for recognizing and treating cannabis use disorders. *Addiction* 97 (Suppl 1), 4-15.
- Dennis, M., Titus, J.C., Diamond, G., Donaldson, J., Godley, S.H., Tims, F.M., Webb, C., Kaminer, Y., Babor, T., Roebuck, M.C., Godley, M.D., Hamilton, N., Liddle, H., Scott, C.K. & the CYT Steering Committee (2002). The Cannabis Youth Treatment (CYT) experiment: rationale, study design and analysis plans. *Addiction* 97 (Suppl 1), 16-34.
- Derogatis, L.R. (1993). *Brief Symptom Inventory: Administration, scoring and procedures manual* (3rd edn). Minneapolis: National Computer Systems.
- DeWit, D.J., Hance, J., Offord, D.R. & Ogborne, A. (2000). The influence of early and frequent use of marijuana on the risk of desistance and progression to marijuana-related harm. *Preventive Medicine* 31, 455-464.
- European Monitoring Centre for Drugs and drug Addiction (EMCDDA). (2002). *Annual report on the state of the drug problem in the European Union and Norway*. EMCDDA.
- Fergusson, D.M. & Horwood, L.J. (1997). Early onset cannabis use and psychosocial adjustment in young adults. *Addiction* 92, 279-296.
- Fergusson, D.M. & Horwood, L.J. (2000a). Does cannabis use encourage other forms of illicit drug use? *Addiction* 95, 505-520.

- Fergusson, D.M. & Horwood, L.J. (2000b). Cannabis use and dependence in a New Zealand birth cohort. *New Zealand Medical Journal* 113, 156-158.
- Fergusson, D., Horwood, L., & Lynskey, M. (1994). Parental separation, adolescent psychopathology and problem behaviours. *Journal of the American Academy of Child and Adolescent Psychiatry* 33, 1122-1131.
- Fergusson, D.M., Horwood, L.J. & Swain-Campbell, N. (2002). Cannabis use and psychosocial adjustment in adolescence and young adulthood. *Addiction* 97, 1123-1135.
- French, M.T., Roebuck, C., Deniis, M.L., Diamond, G., Godley, S.H., Tims, F., Webb, C. & Herrell, J.M. (2002). The economic cost of outpatient marijuana treatment for adolescents: findings from a multi-site field experiment. *Addiction* 97 (Suppl 1), 84-97.
- Gerstein, D.R. & Johnson, R.A. (1999). *Adolescent and young adults in the National Treatment Improvement Evaluation Study* (National Evaluation Data Services Report). Rockville, MD: Center for Substance Abuse Treatment.
- Gossop, M., Griffiths, P., Powis, B. & Strang, J. (1992). Severity of dependence and route of administration in heroin, cocaine and amphetamines. *British Journal of Addiction* 87, 1527-1536.
- Hall, W., Degenhardt, L. & Lynskey, M. (2001). *The health and psychological effects of cannabis use* (National Drug Strategy Monograph 44). Canberra: Commonwealth Department of Health and Ageing.
- Hall W, Johnston L. Donnelly N. (1999). The epidemiology of cannabis use and its consequences. In: H. Kalant, W. Corrigall, W. Hall & R. Smart (eds.), *The health effects of cannabis* (pp.71-125). Toronto, Canada: Centre for Addiction and Mental Health.
- Hall, W., & Swift, W. (2000). The THC content of cannabis in Australia: Evidence and implications. *Australian and New Zealand Journal of Public Health* 24, 503-508.
- Hubbard, R.L., Marsden, M.E., Rachal, J.V., Harwood, H.J., Cavanaugh, E.R., & Ginzburg, H.M. (1989). *Drug abuse treatment: A national study of effectiveness*. Chapel Hill, NC: University of North Carolina Press.
- Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2001). *Monitoring the future: National results on adolescent drug use : Overview of key findings 2000* . Bethesda, MD: National Institute on Drug Abuse.
- Lawendowski, L. A. (1998). A motivational intervention for adolescent smokers. *Preventive Medicine* 27, A39-A46.
- Lynskey, M. & Hall, W. (2000). The effects of adolescent cannabis use on educational attainment: A review. *Addiction* 95, 1621-1630.
- Lynskey, M.T., Heath, A.C., Bucholz, K.K., Slutske, W.S., Madden, P.A.F., Nelson, E.C., Statham, D.J. & Martin, N.G. (2003). Escalation of drug use in early-onset cannabis users vs co-twin controls. *JAMA* 289, 427-433.

- McCambridge, J. & Strang, J. (2004). The efficacy of single-session motivational interviewing in reducing drug consumption and perceptions of drug-related risk and harm among young people. *Addiction* 99, 39-52
- Meyers, K., Webb, A., Frantz, J. & Randall, M. (2003). What does it take to retain substance-abusing adolescents in research protocols? Delineation of effort required, strategies undertaken, costs incurred, and 6-month post-treatment differences by retention difficulty. *Drug and Alcohol Dependence* 69, 73-85.
- Miller, W.R. & Heather, N. (Eds.) (1998). *Treating addictive behaviours: Processes of change*. New York: Plenum Press.
- Miller, W. R. & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York: The Guilford Press.
- Miller, W. R. & Sovereign, R. G. (1989). The check-up: A model for early intervention in addictive behaviors. In T. Loberg, W. R. Miller, P. E. Nathan, & G. A. Marlatt (Eds.), *Addictive Behaviors: Prevention and early intervention* (pp. 219-231). Amsterdam: Swets and Zeitlinger.
- Monti, P.M., Colby, S.M., Barnett, N.P., Spirito, A., Rohsenow, D.J., Myers, M., Woolard, R., & Lewander, W. (1999). Brief intervention for harm reduction with alcohol-positive older adolescents in a hospital emergency department. *Journal of Consulting and Clinical Psychology* 67, 989-994.
- Monti, P.M., Colby, S.M. & O'Leary, T.A. (Eds.) (2001). *Adolescents, alcohol, and substance abuse: Reaching teens through brief interventions*. New York: The Guilford Press.
- Morril, A.R., McCaffrey, D.F. & Paddock, S.M. (2002). Reassessing the marijuana gateway effect. *Addiction* 97, 1493-1504.
- Muck, R., Zempolich, K.A., Titus, J.C., Fishman, M., Godley, M.D. & Schwebel, R. (2001). An overview of the effectiveness of adolescent substance abuse treatment models. *Youth and Society* 33, 143-168.
- Myers, M.G., Brown, S.A., Tate, S., Abrantes, A. & Tomlinson, K. (2001). Toward brief intervention for adolescents with substance abuse and comorbid psychiatric problems. In: P.M. Monti, S.M. Colby & T.A. O'Leary. (Eds.) (2001). *Adolescents, alcohol, and substance abuse: Reaching teens through brief interventions* (pp. 275-296). New York: The Guilford Press.
- Office of Applied Studies (OAS). (1995). *Services Research Outcome Study (SROS)*. Rockville, MD: SAMHSA. [On line]. Available: <http://www.samhsa.gov/oas/sros/httoc.htm>
- Patton, G.C., Coffey, C., Carlin, J.B., Degenhardt, L., Lynskey, M. & Hall, W. (2002). Cannabis use and mental health in young people: cohort study. *British Medical Journal* 325, 1195-1198.
- Perkonig, A., Lieb, R., Höfler, M., Schuster, P., Sonntag, H. & Wittchen, H-U. (1999). Patterns of cannabis use, abuse and dependence over time: incidence, progression and stability in a sample of 1228 adolescents. *Addiction* 94, 1663-1678.

- Poulton, R.G., Brooke, M., Moffitt, T.E., Stanton, W.R. & Silva, P.A. (1997). Prevalence and correlates of cannabis use and dependence in young New Zealanders. *New Zealand Medical Journal* 110, 68-70.
- Reid, A., Lynskey, M., Copeland, J. (2000). Cannabis use among Australian adolescents: findings of the 1998 National Drug Strategy Household Survey. *Australian and New Zealand Journal of Public Health* 24, 596-602.
- Richmond, R., Heather, N., Wodak, A., Kehoe, L. & Webster, I. (1995). Controlled evaluation of a general practice-based brief intervention for excessive drinking. *Addiction* 90, 119-132.
- Rollnick, S., & Miller, W.R. (1995). What is motivational interviewing? *Behavioural and Cognitive Psychotherapy* 23, 325-334.
- Rounds-Bryant, J.L. & Staab, J. (2001). Patient characteristics and treatment outcomes for African American, Hispanic and white adolescents in DATOS-A. *Journal of Adolescent Research* 16, 624-641.
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2002). *National Survey on Drug Use and Health*. Rockville, MD: Office of Applied Statistics
- Sobell, L.C., Sobell, M.B., Leo, G.I. & Cancilla, A. (1988). Reliability of a Timeline Method: assessing normal drinkers' reports of recent drinking and a comparative evaluation across several populations. *British Journal of Addiction* 83, 393-402.
- Spooner, C. (1999). Causes and correlates of adolescent drug abuse and implications for treatment. *Drug and Alcohol Review* 18, 453-475.
- Spooner, C., Mattick, R.P. & Noffs, W. (2001). Outcomes of a comprehensive treatment program for adolescents with a substance-use disorder. *Journal of Substance Abuse Treatment* 20, 205-214.
- Swift, W., Hall, W. & Copeland, J. (1998). Choosing a diagnostic cut-off for cannabis dependence. *Addiction* 93, 1681-1692.
- Swift, W., Hall, W. & Teesson, M. (2001). Cannabis use and dependence among Australian adults: results from the National Survey of Mental Health and Wellbeing. *Addiction* 96, 737-748.
- Tims, F.M., Dennis, M.L., Hamilton, N., Buchan, B.J., Diamond, G., Funk, R. & Brantley, L.B. (2002). Characteristics and problems of 600 adolescent cannabis abusers in outpatient treatment. *Addiction* 97 (Suppl. 1), 46-57.
- Veit, F. (2000). Ethical issues in harm reduction for adolescent illicit drug users: the Adolescent Forensic Health Service approach (Harm Reduction Digest 11). *Drug and Alcohol Review* 19, 457-467.
- Von Sydow, K., Lieb, R., Pfister, H., Höfler, M., Sonntag, H. & Wittchen, H-U. (2001). The natural course of cannabis use, abuse and dependence over four years: a longitudinal community study of adolescents and young adults. *Drug and Alcohol Dependence* 64, 347-361.

Von Sydow, K., Lieb, R., Pfister, H., Höfler, M. & Wittchen, H-U. (2002). What predicts incident use of cannabis and progression to abuse and dependence? A 4-year prospective examination of risk factors in a community sample of adolescents and young adults. *Drug and Alcohol Dependence* 68, 49-64.

Wagner, E.F., Brown, S.A., Monti, P.M., Myers, M.G., & Waldron, H.B. (1999). Innovations in adolescent substance abuse intervention. *Alcoholism: Clinical and Experimental Research* 23, 236-249.

White, V. (2001). *Australian secondary students' use of over-the-counter and illicit substances in 1999* (National Drug Strategy monograph 46). Canberra: Commonwealth Department of Health and Aged Care.

Williams, R.J., Chang, S.Y. & the Addiction Centre Adolescent Research Group. (2000). A comprehensive and comparative review of adolescent substance abuse treatment outcome. *Clinical Psychology: Science and Practice* 7, 138-166.

Winters, K. (1999). Treating adolescents with substance use disorders: An overview of practice issues and treatment outcomes. *Substance Abuse* 20, 203-223.

Appendix A: ADOLESCENT CANNABIS CHECK-UP

TREATMENT MANUAL

OVERVIEW OF THE ADOLESCENT CANNABIS CHECK-UP

This manual provides a detailed description of the Adolescent Cannabis Check-up and how it was implemented and evaluated. It includes both the clinical content of the intervention and the research the processes which surrounded it.

AIMS AND OBJECTIVES

The specific objectives of the Cannabis Check-up

- to enhance motivation to reduce/cease cannabis use among young people;
- to evaluate the validity of parents' concerns about the suspected levels of cannabis use among their adolescent children;
- to assist the families of young people to learn how to effectively communicate their concern and encourage the young person to make changes in problematic cannabis use;
- to identify, and where possible to intervene with, risk and protective factors within the family; and
- In addition, this study aims to test the effectiveness of a one session cognitive behavioural intervention for cannabis abuse/dependence compared to a three month wait-list control, in reducing levels of cannabis use and associated problems.

PARTICIPANTS

Young people between the ages of 14 to 19 years and one or more carers/concerned others (henceforth referred to as CO) for each young person participating.

Eligibility criteria for young people:

- Aged 14 to 19 years;
- Used cannabis in the last 30 days;
- No more than weekly injecting drug use in the past 90 days;
- No more than an average of 80gms alcohol per day in the past 90 days;
- No evidence of medical impairment, cognitive impairments such as intellectual disability or acute psychotic conditions that would prevent participation;
- Fluent in English

Eligibility criteria for CO:

- The cannabis use of a young person is their primary concern;
- No evidence of medical impairment, cognitive impairments such as intellectual disability or acute psychotic conditions that would prevent participation;
- Fluent in English

Recruitment:

The project's recruitment efforts were diverse and included liaison with community treatment agencies, presentations to interested groups (e.g. youth workers and school councillors), targeted media appearances and advertisements.

METHODOLOGY

The general clinical approach is that of a series of short, individual, in-person sessions that help the participant make informed choices regarding their cannabis use. There is no confrontation regarding the participants' cannabis use, but the provision of a non-judgmental atmosphere in which questions may be asked. There is no overt attempt to get participants to change their cannabis use unless requested by them.

Procedure

It was expected that the majority of approaches to the study will be from CO, usually parents/carers. COs would contact the study researchers by telephone and be screened for eligibility and provided with an outline of the intervention. If they are interested in participating they will be invited to attend the first session.

Session 1: The focus of this session will depend on the specific needs of the participants. The purposes of this session are: (1) to provide accurate information on cannabis, (2) to clarify and assess the nature of the CO's specific concerns, (3) to enhance the CO's skills in effectively communicating concerns to the young person, (4) to provide a clear understanding of the nature and purpose of the Check-up, and (5) to help the CO consider and practice ways of encouraging the young person to participate in the Check-up (alone or with the CO).

The CO would be interviewed to obtain data concerning their perceptions of the young person's patterns of cannabis use, its consequences and their stage of change, the young person's use of alcohol and other drugs, the CO's views of the positive and negative aspects of cannabis use, the CO's perspectives on the pros and cons of the young person changing or not changing, perceived obstacles to initiating changes, and other pertinent attitudes and beliefs. They will also complete the Family Assessment Device (a standardised psychometric test of family functioning), and related open-ended questions on family strengths and capacities.

Session 2: This session comprises the baseline assessment of the young person, which is the first session of the Cannabis Check-up. The young person would be interviewed to obtain data concerning their patterns of cannabis use (including dependence), use of alcohol and other drugs, involvement in crime, positive and negative consequences associated with use and changes in use, perceived obstacles to initiating changes, and other pertinent attitudes and beliefs. In addition, data on health, family (including the Family Assessment Device), social and demographics factors will be collected. This session will be conducted with the young person alone to maximise the validity of the self-report data, with the assurance that their privacy will be respected. A final baseline measure to be collected is urinary cannabinoid level.

Session 3: About one week following the previous session, the young person would return for the feedback session. The clinician would have prepared a written Personal Feedback Report, and the participants in this session would together review the report. An abbreviated form of the feedback will be reported, with the young person's permission, to the CO.

Randomised-controlled trial: Where the young person meets DSM-IV criteria for cannabis abuse/dependence and they and/or their CO are willing, they will be offered participation in a randomised-controlled trial. This compares a one session cognitive-behavioural intervention (CBT) which provides strategies for quitting/decreasing cannabis use, with a wait-list control (WL) where they would be followed-up and offered treatment 12 weeks later.

3 Month Follow-up Assessment: Three months following the last participation in the Check-up, the young person is asked to return for a follow-up assessment interview by a "blind" research assistant. This would gather outcome data on all the relevant aspects of the study including levels of cannabis and other drug use, stage of change, family relationships, measures of psychosocial functioning, involvement in crime, treatment satisfaction and urinary cannabinoid levels. The CO will also be followed up at this time and asked about their experiences over the same time period.

6 Month Follow-up Assessment: A second follow-up of the CO and young person will be conducted six months following the last participation in the Check-up. This will basically be a repeat of the 3 month follow-up session.

THE CANNABIS CHECK-UP

SCREENING

The aim of the telephone screen is to assess the caller's eligibility for the Check-up and provide them with information about participation. There are two versions of the telephone screen: one for the CO and one for the young person. Make sure you have copies of both available. When you receive a phone call, follow the procedure on the telephone screen.

In addition to assessing eligibility, the screener provides important information on the characteristics of those who are ineligible for the study, and those who are eligible but not interested or fail to attend their appointment. These people can then be compared to those who participated. For this reason, it is important to complete the screener even if it becomes clear the person is not eligible. This is made explicit on the screener.

We anticipate in most cases the CO will make the initial contact and subsequently try to engage the young person in the Check-up.

At the end of each screener is a summary table, which requires you to tick the caller's eligibility on each inclusion criterion – this should be completed after each screen.

Concerned Other screener

The CO screener needs to establish two things: whether the CO is concerned primarily about a young person's cannabis use, and if so, whether the young person is eligible for the study. For the first few minutes of the call spend some time establishing the caller's concerns – let them ventilate if necessary. If cannabis use is not a primary concern, the person is ineligible - you may need to refer them elsewhere at this stage and conclude the call.

If it is a concern, provide them with some information on the study. Decide whether potential problems exist with the caller's English fluency and cognitive impairment. Even if the person is ineligible on these criteria, continue to assess so we can collect information on those who aren't eligible, and then follow the instructions for ineligibility at the end of the screen. Once you have assessed the CO's eligibility, assess whether the young person meets entry criteria. This will be based on the CO's perception of whether the young person is eligible. They may not know the answers to your questions about the young person's cannabis and other drug use, and that is why it is so important to screen the young person for their eligibility as well prior to the assessment session.

If the CO is eligible but it is clear at this stage that the young person is not, record the screening information anyway, and follow the instructions for ineligibility on the screener.

If the concerned person is eligible and the adolescent is/seems eligible, provide them with more information and make an appointment if they are interested. If the adolescent agrees to hear more about the study, they will need to complete the young person's screener. Always try and screen them over the phone before they come in for the assessment session in case (despite their parent's concern) they are not eligible, because it is a waste of everybody's time for them to attend the session if it will not be conducted. If there is no way of screening them on the phone beforehand, screen them before you start the assessment session. Make it clear to the CO that in this case if the young person is found to be ineligible, they will not be able to participate. Explain they will be informed of alternative referrals if required.

Young person's screener

The screener for the young person is more straightforward. After spending a few moments establishing the reason for the call or their interest in the study, and providing some information on the Check-up, determine their eligibility. Follow the screener to collect information on demographics, cannabis use patterns and stage of change, other drug use and treatment history, in order to assess whether the young person meets the eligibility criteria described above. You are also asked to decide whether potential problems exist with English fluency, cognitive impairment and literacy. It is important that all these questions are answered as some of these provide core data not collected in the baseline assessment.

If the young person is eligible, they are provided with further information and asked about their interest in participating. If they are interested, an appointment is made. If they are ineligible, follow the instructions on the screener.

SESSION ONE: CONCERNED OTHER'S ASSESSMENT SESSION

Approximate length: 60-90 minutes

What you will need for this session

1. Completed CO telephone screener
2. 2 copies of the CO consent form
3. 2 copies of the consent form to allow young person to participate (if applicable)
4. Baseline CO assessment
5. Clinician checklist
6. Cannabis facts booklet for parents
7. Communicating with a young person about cannabis booklet
8. Insert on engaging the young person in the Check-up
9. Follow-up Contact Form to collect follow-up contact details

NB: This session is not taped.

Offer to read the materials (e.g., consent form and self-report questionnaires) to all participants if they would like, to give poor readers an easy opportunity not to have to say they can't read something.

Procedure

The format and content of the first session with the CO may be flexible. If the CO does not know whether the young person wants to participate, the first session will comprise the assessment, education on cannabis and provision of tips on communication and engaging the young person in the Check-up.

If the young person has agreed prior to this session to attend, this session can be combined with the baseline assessment for the young person. In this case there is no need to spend time on how to engage the young person into the study (although the CO may still want some general advice on how to talk to them and a copy of the booklet). If the sessions are combined, assess the CO without the young person being present.

Welcome them. Take a few moments to establish rapport, check how they're feeling about the session and answer any brief questions they might have.

Explain that today you will be asking them to answer questions and to complete questionnaires to help you find out more about them, and their concerns about the young person and their cannabis use. You will also provide them with information on cannabis, and spend some time providing them with tips on how to talk with a young person and engage them in the Check-up. It will take about 60-90 minutes and they don't have to answer any questions they do not want to answer.

Remind them of the Check-up procedure (this was previously outlined in the screener). Explain that if the young person gives permission they may attend the feedback session.

Review the CO consent form step-by-step (including limits of confidentiality), answer any questions and ask them to sign and date the form. Give them a copy to keep.

Begin with the assessment interview as this will help inform the educational component of the session. Follow the order in the CO assessment interview. This is basically interviewer-administered, except for the following questionnaires which are to be self-completed (unless they would like you to read them): Risk Perception questionnaire, and Family Assessment Device

At the beginning of the assessment interview turn to a discussion of the CO's current situation. The content of the discussion will vary according to the particular concerns of the CO. Elicit their concerns about the young person involved. "OK, lets talk about what's worrying you at the moment, what concerns do you have about what's going on with Bob?" Encourage the CO to describe as fully as possible the problem as they see it. Probe for details of what is currently happening, and how things have changed over time. "What first made you think Bob was smoking pot?"; "are there things that are different about his behaviour now?"; "what is the relationship between the two of you like now?"; "how has it affected the family?"; "what's happening with his work/school?"; "have you and Bob ever talked about drug use?, what happened?"; "where do you see this leading for Bob?"

Legitimise the CO's concerns as appropriate ("I can see why that would worry you"; "that must be difficult for you"). If the young person's level of use is not obviously highly problematic, also decatastrophise the cannabis use. Discuss adolescence as a time of transition and experimentation. Give an indication of the lifetime prevalence of cannabis use amongst young people. Point out that the majority do not go on to regular use, or move on to other drugs. (Be careful not to appear to minimise the problem). If appropriate discuss the continuum of use.

Ask if the CO would like to spend some time talking about cannabis and its effects. Provide the Cannabis Facts booklet and give an overview of the information it contains. Encourage the CO to express any particular concerns they have about the use and effects of cannabis (e.g. is it a gateway drug?; does it cause brain damage?) and discuss these issues.

Return to the discussion of how well the CO and the young person communicate. "You mentioned earlier that when you last tried to talk with Bob about smoking, it quickly turned into an argument. What's the level of communication between you like usually?" Acknowledge that communication is complex and often difficult, and perhaps particularly so with young people. Go through each of the strategies outlined in the "Communication Tips" booklet and request the CO's comments and questions. Emphasise the importance of a calm, concerned, and non-accusatory approach to the discussion of cannabis.

There are a number of reasons why parents may present to discuss their concerns about their young person's cannabis use. In most cases they will want information on the effects of cannabis and options for treatment, others will also want validation of their parenting skills, advice on boundary setting, or reassurance that they have not failed as a parent. Some parents may feel that they have failed or are somehow a "bad" parent because their child is using cannabis. Provide support and reassurance on this point. Suggest that if they were a "bad" parent they would be unlikely to be showing concern, and taking the time to attend the current interview. Point out that the determinants of drug use are complex and range from individual to societal factors. Family influence is important, and can be a very positive influence, but it is not the sole factor involved. (Mention, however, that the CO might give some thought to their own drug use, e.g. alcohol, and consider whether they are modeling responsible use. Young people are often very sensitive to perceived hypocrisy).

Ask the CO for their opinion on how easy/difficult it will be for them to discuss the Check-up with the young person. Go through the “Tips for Engaging a Young Person in the Cannabis Check-up” and answer any questions the CO might have. Point out that the young person is very welcome to call project staff for more details on the project if they are reluctant to commit to involvement.

This session is intended primarily to be educational, and to support the CO’s self-efficacy in talking with the young person about cannabis use. If it is apparent that there are complex personal or family issues involved provide referral information as appropriate (see pp. 15-16 for discussion of referral and mandatory reporting issues).

At the completion of the session collect information enabling you to contact them again, using the Follow-up Contact Form. Try to collect as much information as possible for the CO and at least 2 independent contacts (excluding the young person). One approach is to ask the CO for appropriate contacts if things were going well in 3 months, and if things were going badly.

If the young person has not yet been engaged, tell the CO that if you haven’t heard from them at the end of the week/in a few days, you will call them to see how they are going in their attempts to engage the young person. This may take some time if the young person is reluctant, so a few calls may be necessary. Note the calls you make on the checklist at the front of the file.

If relevant (young person under 16 years: see section on Consent Issues), explain the consent form asking them to give permission for the young person to participate. Ask them to complete the form. Give them a copy to keep.

Answer any further questions and thank them for their participation.

SESSION TWO: YOUNG PERSON'S ASSESSMENT SESSION

Approximate length: 60-90 minutes

What you will need for this session

1. Young person's telephone screener
2. 2 copies of the young person's consent form
3. Baseline young person's assessment, including Timeline Follow-back instructions
4. Cannabis facts booklet for young people
5. Follow-up Contact Form to collect follow-up contact details
6. Equipment for collecting urine sample

NB: This session is not taped.

NB: Again, offer to read the materials (e.g., consent form and self-report questionnaires) to all participants if they would like, to give poor readers an easy opportunity not to have to say they can't read something.

NB: If, during this session, the young person discloses child abuse, that they are in danger of harm or in danger of harming themselves or others, follow the protocol for "Mandatory Reporting Issues". Similarly, if their responses on the BSI or elsewhere in the session suggest depression, self-harm/suicidality or thoughts of harming others, follow the protocol in the section on mandatory reporting.

Procedure

Welcome them. Take a few moments to establish rapport, check how they're feeling about the session and answer any brief questions they might have.

Complete the telephone screener if not completed previously in order to ensure eligibility. If the young person is not eligible, the session will be terminated and a referral may be necessary. This possibility will have been previously explained to the CO.

Explain that today you will be asking them to answer questions and to complete questionnaires to help you find out more about them, such as their concerns and attitudes about their cannabis use, and their relationship with the CO. It will take about 60-90 minutes and they don't have to answer any questions they do not want to answer. Explain that at the conclusion of the assessment we will ask them to provide a urine sample so we can measure the amount of cannabis in their body. Assure them that this will not be discussed with anyone else without their permission. If they are not willing to provide a sample, try to encourage them but do not force the issue.

Explain that you will arrange another meeting in about 1 week to review a feedback form created specifically for them based on the information they provide today. That meeting will last about 1 hour and there will be more discussion in that meeting. Organise a time and place for the feedback session now.

Review the consent form step-by-step (including limits of confidentiality), answer any questions and ask them to sign and date the form. Give them a copy to keep. If the young person wishes to participate and would normally require parental consent, but they have no CO or their CO is

not interested/unaware of their participation, allow the young person's consent to suffice (i.e., allow waiver of parental consent: see section on consent Issues).

Follow the order of assessment as presented in the assessment questionnaire. At all times remain objective and non-judgmental. The assessment is basically interviewer-administered, except for the following questionnaires which are to be self-completed (unless the young person would like you to read them): Risk Perception Questionnaire; Costs and Benefits Scale; Brief Symptom Inventory; and Family Assessment Device.

The instructions for the timeline follow-back are listed in Appendix B.

After the assessment measures have been completed, provide them with the booklet on cannabis facts for young people.

Please reiterate the time and location of the feedback session. Collect information enabling you to contact them again (use the same method described in the CO screener – make sure you do not restrict their contacts to the CO). You may wish to make a reminder call regarding the feedback session in the following week.

Ask the young person to provide a urine specimen.

Answer any questions the young person may have and thank them for their participation.

SESSION THREE: YOUNG PERSON'S FEEDBACK SESSION

Approximate length: 60-90 minutes

What you will need for this session

1. Baseline assessment
2. 2 copies of the Personalised feedback report
3. Young person's assessment of session checklist
4. Clinician checklist
5. Tape recorder and blank tape
6. Follow-up Contact forms to check if up-to-date
7. Envelopes for randomisation if eligible

NB: This session is taped.

NB: Again, if the young person discloses child abuse, that they are in danger of harm or in danger of harming themselves or others, follow the protocol for "Mandatory Reporting Issues".

Introduction and overview

Motivational Interviewing (MI) refers to an empathic, reflective therapeutic style designed to elicit self-motivation to change from the concerned participant.

The five general strategies of MI are: 1) express empathy, 2) develop discrepancy, 3) avoid argumentation, 4) roll with resistance, and 5) support self-efficacy.

The counsellor uses reflective listening to express empathy regarding the participant's ambivalence rather than confront him or her with the need to change. The assumptions are that acceptance facilitates change and that ambivalence is normal.

The goal of MI is to develop discrepancy between present behaviour and important personal goals endorsed by the participant in order to motivate change. In PF, however, it is important that the participant present the reasons for change. Arguments with the participant over the need to change are assumed to be counterproductive and participant resistance becomes a signal to the counsellor to change strategies.

From a **stages-of change** perspective, the MI approach addresses where the participant currently is in the cycle of change and assists the person in moving through the stages toward successful sustained change.

"Rolling with resistance" refers to reframing a participant's ambivalence, turning the question or problem back to the participant, and allowing the participant to accept what he or she wants from the interaction (see example below).

The counsellor also works to support the participant's perception that he or she is capable of making changes in his or her behaviour. Self-efficacy is fostered through the counsellor's optimism and confidence in the participant.

MI skills include the use of a number of important counselling strategies (see next section for specific examples):

- open-ended questions
- reflective listening
- affirmation of the participant
- periodic summaries of the pros and cons of change expressed by the participant
- elicitation of self-motivational statements
- recognising and dealing with resistance
- recognising readiness for change
- providing information and advice

As the participant expresses increasing interest in modifying his or her use, the counsellor works carefully to support efficacy for making a change without prescribing the change and engaging resistance. If and when the participant clearly expresses a commitment to change, the counsellor asks the participant about the steps or methods he or she will use in making the change.

Preparing for the feedback session

AIM

To prepare the person for what to expect in the feedback session

FUNCTION

Build rapport and orient the young person to what will happen in the session.

HOW TO DO IT

1. Have 2 copies of PFR (one for young person and one for you) and some referral information in case it is needed.
2. Begin by spending some time building rapport and engaging the young person. This is a critical aspect of the session and will be aided by an approach that uses positive connotation, empathy, humour, use of self, and some familiarity with street language. The goal is to assist the young person to feel safe and supported. Start by welcoming them back and affirming their choice to continue with the Check-up (e.g. "It's good to see you, I'm glad you could make it"). Initiate some casual conversation and take sufficient time to allow them to settle in and feel at ease. Encourage them to talk about what they have been doing and what is currently of interest. Inquire about their response to the assessment session ("what did you think about the assessment last week?"), and discuss any concerns or questions they have.
3. Explain the purpose of the current session. (e.g., "Do you know what we're going to do today? If it's okay with you, today we're going to. ... Do you have any feelings about doing this?" *Explore feelings and reflect. Clarify purpose of session in response to feelings participant just shared*). Reiterate the confidentiality of the session.
4. Give a brief step-by-step preview of PFR before going through each section.
5. Go through various sections of PFR and seek elaboration ("Tell me more about this...")
6. Use paraphrasing reflections so they know that you are listening

7. Listen for expressions of motivation to change and feed them back to the young person. This is reinforcing to them.
8. Be open and don't be too quick to form an opinion concerning where the participant is at regarding their cannabis use and motivation to change (assume person has some ambivalence even if not expressed directly at first).

REMINDERS

Take notes as you go to help you summarise key information later in the session. Use the outline of the PFR to put notes on (see attached). Let the young person know that you will take some notes, if that's okay, because you don't want to forget important information.

Watch the pace. Push gently if they're going too slowly, but don't rush, and slow the person down if they're going too fast.

Keep in mind the young person's comments and other information from their assessment that will be useful in the session.

Aim for about a 3:1 proportion of reflections to questions

1. Reasons for attending/stage of change

AIM:

To set up the session by recapping and clarifying the young person's reason for participating in the Check-up and where they're at with their cannabis use

FUNCTION:

Allows the young person to have their current perception of their cannabis use (their stage of change) discussed and accepted without confrontation. Their motivation for attending (e.g. voluntary/coerced, seeking information/assistance) and expectations can also be explored.

HOW TO DO IT:

1. Ask about the young person's reasons for attending and their expectations (e.g. "it would be helpful for me know what you would like to get out of the Check-up, and what got you interested in coming along. Can you tell me about that; why you chose to attend/what you'd like to get out of it"). Reflect back and explore their reasons and expectations. Affirm their effort in agreeing to participate.
2. Feed back the young person's stage of change as assessed at baseline. Ask if this is an accurate reflection of where they are with their smoking. (e.g. "you said last during the assessment that your smoking.....does that sound right? Can you tell me a bit more about that?")

REMINDER:

Take note of any problem recognition or motivation to change statements and feed these back.

2. Good things about cannabis use

AIM:

To explore the young person's positive feelings about cannabis use without imposing on them any assumptions about it being a "problem."

FUNCTION:

This is a useful way to start the session because it allows an exploration of cannabis smoking in a non-threatening manner, it builds rapport and understanding of the context of the behaviour, and it minimises resistance because you're talking about positive things first.

HOW TO DO IT

1. Review the good things the young person identified about cannabis use, using the actual responses that they provided.
2. Inquire about which of these good things are important reasons to smoke.
3. Inquire about any other important good things that are not of the list. *Document any other reasons generated on your copy of PFR.*
4. Use lots of reflective listening and summarise periodically. Offer a summary reflection as succinctly as possible. (e.g., "So smoking cannabis helps you. ...")
5. You may also want to explore some reasons. (e.g., "What is it that you like about this?~ "Tell me more about this?")

REMINDERS

- Don't spend too much time on the positives, particularly if the assessment session indicates that some ambivalence is already present. Once rapport is established and you have a good sense of the positives, move on to the next section.

3. Cannabis use and other drug use patterns

AIM

To review young person's pattern of cannabis, alcohol, and other drug use, including normative comparisons of their use with other young people.

FUNCTION

It allows the young person to get an overall picture of their substance use. It also provides information that can highlight discrepancy between the young person's use and that of other young people, which may generate a sense of discomfort that often precedes a decision to make a change.

HOW TO DO IT

- Review young person's pattern of cannabis use by going through the use statements (age of first use, days of use/month, typical pattern of use, previous attempts at moderation/cessation of use). Inquire about accuracy and their reaction. (e.g., "How does that look to you? ...Does that look pretty accurate? ...How did your cannabis use change over time? ...Tell me about your early experiences with cannabis."). If the young person is interested, give very brief and straightforward feedback of their urinalysis results.
2. Review their cannabis use relative to other young people (ever used, frequency in past 30 days, percentage of young people who smoke as much or more than you, less than you). Inquire -e.g., "What do you make of this? What do you think about that? What's going through your mind after seeing this? Then paraphrase the individual's response.
 3. Review their alcohol use relative to other young people (age of first use, use in past year, use in past week).
 4. Review their other drug use relative to other young people (percentage reporting ever-used).

REMINDERS

- Let the young person sit with their feelings and reactions to the comparisons. Don't "hammer" them with the statistics or "rescue" them from their discomfort. It's part of the process.
- Don't argue over the accuracy of the statistics. Reflect their feelings about seeing comparisons.

Data sources: 1) School Survey, NDS

3. Less/ not-so-good things about cannabis use

AIM

To explore the less good things about cannabis use for the young person without imposing on them any assumptions about it being a "problem." They, rather than you, identify problem areas or reasons for concern or change.

FUNCTION

This is a useful way to continue the session because you have already explored the "good things" and it minimises the resistance because you're talking about "less good things" rather than "problems" or "concerns". This allows the young person to identify problem areas without feeling labelled.

HOW TO DO IT

1. Review the "not-so-good" things the young person identified about cannabis use using their actual responses as a guide. (e.g., "We've talked about the things you like about cannabis smoking. Now I'd like to talk about the other side: the not-so-good things about your cannabis use. Here's what you indicated in the assessment session. ..") Go through and inquire about each item, encourage the young person to elaborate on each.
2. Inquire about which of these not-so-good things are important drawbacks or reasons to not smoke.
3. Inquire about any other important not-so-good things that are not on the list. (e.g., "What other things about your cannabis use have you, or people close to you, feeling worried? ...What else have you noticed?"). Document any other reasons generated on your copy of PFR
4. Offer a summary reflection as succinctly as possible. For example, "So smoking cannabis makes you. ..."
5. Provide an integrative summary of positive and negative things about cannabis smoking for the young person (e.g., "So, smoking cannabis helps you relax...you enjoy smoking with friends, and it seems to help when you're feeling fed up. On the other hand, you feel less motivated, you sometimes say things you don't mean after smoking, and you're having a hard time concentrating which has contributed to lowering your grades at school. ")

REMINDERS

- Avoid using words like "problem" or "concern" unless the person does.
- Don't assume that a "not-so-good thing" is a concern for the person.
- Keep to the task at hand, and avoid raising new topics or ideas of your own.

4. Anticipated consequences of reducing (and increasing) use

AIM

To explore the young person's anticipated costs and benefits of reducing and increasing their cannabis use.

FUNCTION

Using the hypothetical to facilitate exploration of what's attractive to them about reducing use and what's unattractive to them about reducing use. It allows them to compare the costs and benefits of making changes in their use.

HOW TO DO IT

1. Introduce the topic of reducing use. (e.g., "When I asked you to think about what might happen if you decided to reduce your cannabis use, you identified some costs/negative things and some benefits/positive things you thought might happen. Here's what you said....").
2. Summarise and explore the costs and benefits of reducing use, again using actual responses collected during the assessment phase.
3. Introduce the topic of increasing use. (e.g., "When I asked you to think about what might happen if you decided to increase your cannabis use, you identified some costs/negative things and benefits/positive things you thought might happen. Here's what you said.....")
4. Summarise and explore the costs and benefits of increasing use.
5. Compare the costs and benefits of reducing and increasing use.

REMINDERS

- Be aware of potential approach-avoidance conflict: when the weight begins to shift one way, the person tends to focus on and shift weights to, the opposite side.
- Use MI to explore ambivalence, to clarify competing motivational factors, and to encourage the young person to consider the possibility of change.
- Don't oversimplify or rush through the process. The pros and cons often do not add up in a simple fashion and their value may shift over time. Participants may or may not be aware of the balancing process going on for them; their pros and cons may be contradictory; and their ambivalence can be confusing and difficult to understand. Persist with the ambivalence (and their discomfort), however, because it is often the heart of the problem. Be patient and explore the complexity of the person and their situation.

5. Your relationships

AIM

To identify some important people in the young person's life -people they feel they can trust and count on when having a problem and to get a snapshot of how cannabis use is related to important relationships.

FUNCTION

This is a useful way to identify key people in the young person's life and find out whether or not they know about their cannabis use and their feelings (or expected feelings) about their cannabis use. This provides information that may be helpful in building discrepancies and identifying people who might support or not support the young person if they decide to make changes in use.

HOW TO DO IT

I. Review the names of important people, whether or not they know about the young person's cannabis use, their reactions or potential reactions, and explore the relationship. ("Now I'd like to talk with you about some important people in your life. In our first session, you mentioned that [person] is important to you. How? ... You also said that [person] knows (doesn't know) about your cannabis use and that they think (or would think) [what they would think] about it." *Explore with participant, going through each important person mentioned*)

REMINDERS

- Keep in mind important referents for strategies session if they participate.

6. Goals and aspirations

AIM

To look at the young person's goals for the future and the role of cannabis use in reaching those goals.

FUNCTION

This is a useful way to explore the young person's goals for future, their confidence/self-efficacy and involvement in reaching their goals (which may relate to their confidence in following a change plan), and how increasing and decreasing their cannabis use might affect the likelihood they will reach their goals (which may provide information that is useful in developing discrepancy.

HOW TO DO IT

- I. Review their top 5 goals, confidence in reaching goals, involvement in goals, and their likelihood of reaching each goal if they increase and reduce use. (*For each goal:* "Last week you told me about some of your goals for the next 3 years. You said [goal] was an important goal for you, that you feel confident you can reach that goal, and that you are actively involved in working towards that goal. You also said that, if you increased your cannabis use, you would be [more/less] likely to reach your goal of [goal]. If you reduced your cannabis use, you thought you would be [more/less] likely to reach the same goal.
2. Explore their goals and how they are working to reach them. This will provide information about how they go about making plans to reach goals.

REMINDERS

- Look for goals that may enhance motivation to change.

7. So what now?

Summarise and explore

Immediate goals regarding cannabis

AIM

To review what has been covered and explore where the young person is at regarding their cannabis use. Also, to help them decide what to do if they have expressed a desire to make a decision to change or asks, "What should I do?".

FUNCTION

This is a way to pull together everything that has been covered and provide a setting in which the young person can talk about what they would like to do (e.g., make a change, get more information, think things over, etc.).

HOW TO DO IT

1. Summarise the key information that you have covered ("We've learned a lot about you and your cannabis smoking over the last 2 sessions. Where are you at with this information?")
2. Check in for reactions and feelings at this point (e.g., "What does this mean about your cannabis smoking? What are some reasons why you should continue smoking cannabis the way you have been? And, what about the reasons you think it's time to change? ...If you decide to make a change, what are your hopes for the future?")
3. Find out where the young person is regarding immediate cannabis goals.
4. Inquire and invite the young person to talk about change (e.g., "What do you think you will do? ...It sounds like a part of you would really like to make some changes. Would you like to talk about that? ...Would it be helpful to talk about some things you might consider? *Go through options of 1) no change, 2) stop use, 3) reduce use, and 4) stop for a while to get practice saying "no" and not using, then revisit the issue (more effective for most people than just trying to reduce their use). Then ask "Do any of these options seem attractive to you"*
5. If the young person desires to make a change explore the details of their decision. If not, don't push them, move on to the "how would you know question".

REMINDERS

- Try to elicit problem recognition, concern, and intention to change statements.
- There are different kinds of decisions: *Whether* to do something, *what* to do (goals, targets), and *how* to do it (ways of achieving a goal). This strategy can be useful with any of these kinds of decisions.
- Don't rush a person into premature decision-making. If you get stuck, the person may not be ready to make a decision. Ask if this is so. It can be useful to go back to ambivalence-exploring strategies, or to give the person some time to consider and make a plan for that.

8 (a). The "How would you know?" question.

AIM

To help the young person think through and articulate indicators that would tell them they are smoking too much cannabis. (This question is intended for those people who don't see their current level of cannabis use as problematic. For those who do, ask the "how do you know" question, 8b.

FUNCTION

This primes the young person to recognise the need for change at a later date. By identifying and explicitly stating criteria for recognising "too much" use, the young person will be more likely to register it should they reach that point and will therefore be more likely to initiate change efforts.

HOW TO DO IT

1. Move on to this question once you have established during 7 that the young person is comfortable with their use and is clearly not interested in making or discussing any changes.
 2. First, make sure you have clearly and fully restated and validated their position.
 3. Let them know that you are at this point interested in making sure that they are able to successfully keep using without unacceptable consequences.
 4. Explain that in order to make sure that their use stays within a range that is appropriate to them it is important to identify how they could clearly identify it if their use were to become unacceptably harmful or excessive.
 5. At this point ask the question, "How would you know if you were using too much?"
 6. Push for details. The more concrete examples or signs the young person can generate the better. (For example, if they say, "If I started smoking too often," ask, "How often is too often?" If they say "If my grades drop", ask "Below what, "B" average, "C" average?") Encourage them to identify amount, frequency, effects and consequence indicators.
- Work with the young person to put together the information they give to form a fairly specific description of signs they are smoking too much. Ask what they think their reaction would be if they recognised that they were in that situation.

REMINDERS

- For the young person who truly is using without what they consider to be significant harm, this process should help them think about the effects and characteristics of a level of use they would not be comfortable with. By thinking it through ahead of time, they should be more likely to recognise that stage of use if they should reach it.
- The core of this step is in helping the young person think through the signs of overuse.
- Young people should be more open to this step if it is framed clearly as a way to support their acceptable level of use. It is important to avoid the implication that you expect them to reach this point. Instead, emphasise that this is a precaution to help them guard against the types of problems they have successfully avoided so far.
- Some young people may clearly not be interested in discussing how they would know if their use was becoming excessive or problematic. If gentle prodding is not effective at facilitating a discussion on this matter, it may be best to just summarise where you think they are at on this matter and see how they respond. Then, if it's still clear they are not interested, thank them and move on to wrap up the feedback session.

8 (b). The “how do you know” question.

AIM

To help the young person think through and clearly articulate the reasons they perceive their current level of cannabis use to be too much. (This question is intended for those people who currently do see their cannabis use as problematic. For those who don't, ask the “how would you know” question, 8a.

FUNCTION

Helps the young person recognise and focus on the signs of their overuse, as they see them. Makes explicit key motivators for changing cannabis use.

HOW TO DO IT

1. Move on to this question once you have established during 7 that the young person considers their current use problematic, and is interested in making or discussing changes.
2. Work with the young person to put together the information they give to form a specific description of signs they are smoking too much.
3. Explore each of the signs (e.g. “how is that a problem for you”) and reflect.
4. Provide a summary of the signs of overuse and ask if it is accurate.
5. Ask the young person whether they have plans to change and, if so, how they might go about it. Support their self-efficacy for change (e.g. “you managed to give up the cigarettes, which is great - a lot of people find that really hard, so you’ve shown that you can make tough changes. I think you can change your cannabis smoking as well if that’s what you want. What do you think?”).
6. Offer participation in the RCT if appropriate, and discuss referral options if that is indicated.

9. Wrap-Up

Following the Feedback component....

Affirm their effort and willingness to take the time to look at their cannabis use and to decide to make any changes they have indicated. Ask if they have any further questions or comments.

Using the instructions provided, ask the young person to complete the session evaluation form and place it in an envelope that they will seal and return to you. Assure them that you will not see these ratings to encourage them to report honestly.

Scheduling the RCT or follow-up session

If the young person is eligible for the RCT component of the study (see below), explain what this entails. Tell them that some of their answers indicated they may be experiencing some problems with cannabis (abuse/dependence) – refer back to the feedback and explain. Tell them that if they are interested, they may be eligible to come back one more time for about one hour, and be provided with practical skills aimed to help them reduce/quit their use and minimise the harmful consequences of their use. They will be given a personalised booklet of these strategies to keep.

If the person agrees to participate, tell them that they have a 50:50 chance of getting a session now (CBT), or of waiting for 3 months (WL) and having it then if they want. Tell them that this depends on the envelope you choose: half of the envelopes contain the code indicating they will receive CBT and half contain WL. Explain that you don’t know which code is in the envelope.

Regardless of which session participants will be allocated, ask them to complete the additional assessment forms (Cannabis Problems Questionnaire and the mental health diagnostics) now (i.e., prior to randomisation) to save them time later. They can self-complete the Problems Questionnaire, but you should interview them for the Mental Health Diagnostics.

If they are allocated to the CBT, schedule the appointment for approximately one week away, or if they are willing and there is time, proceed straight into the session. If allocated to the WL tell them they will not receive the session now, but may choose to do so when they are followed up in 3 months. Staple the piece of paper containing their allocation to the inside of the file.

If the young person is not eligible for the RCT, is eligible but not interested, or is eligible but allocated to WL condition, schedule the 3 month follow-up appointment now. Schedule this appointment for 12 weeks from the current date, or as close as possible to this. Explain that you will phone the young person in a week to see how they are going (make a time now) and to confirm this follow-up appointment. Remind them that if they participate in the follow-up, they are eligible to win a department store gift voucher for \$50.

If the young person is not eligible for the RCT or receives the WL condition, but wants treatment now, provide appropriate referral details.

Remember to check your details for contacting the young person are up-to-date.

Complete the clinician checklist for the Feedback Session. Makes any notes applicable and attach the checklist to the feedback notes.

RANDOMISED CONTROLLED TRIAL

ELIGIBILITY

If the young person meets criteria for DSM-IV abuse or dependence (as measured by the adaptation of DSM-IV criteria in the baseline assessment), they are eligible for the RCT component of the trial.

To be eligible for **cannabis abuse**, they must have endorsed at least 1 item from questions 61a-d (i.e. GAIN-I; DSM-IV cannabis abuse).

To be eligible for **cannabis dependence**, they must have endorsed at least 3 items from questions 62a-g (i.e. GAIN-I; DSM-IV cannabis dependence).

NB: The young person can only be diagnosed with cannabis abuse if they do not meet the criteria for cannabis dependence.

RANDOMISATION PROCEDURE

Sessions are allocated the codes CBT for the single session and WL for wait list session. Young people are allocated to a condition when you choose an envelope containing a slip of paper saying CBT or WL. Half of the envelopes will contain CBT and half will contain WL codes. These will be randomly placed in a box and you will choose the next available in the box. Each clinician will be provided with a supply of these envelopes.

STRATEGIES SESSION

Duration: 60-90 minutes

What you will need for this session

- 1 Young person's strategies booklet/worksheet
- 2 Young person's Emergency Plan card
- 3 Instructions for clinician
- 4 Clinician checklist
- 5 Participant feedback form for CBT session
- 6 Tape recorder and blank tape

NB: This session is taped.

If the young person failed to complete the additional assessment forms at the end of the Feedback session, ask them to complete them prior to commencing the session.

The Intervention

This intervention component is based on CBT principles and deals with the person's thoughts, feelings, and behaviours that are related to their cannabis smoking. The intervention focuses on the context within which the individual's cannabis use typically occurs, and assists the person to develop strategies and skills for changing problematic thoughts and behaviours that perpetuate cannabis use.

The session includes a booklet for the young person to keep (not presented in this manual), and is designed as a collaborative exercise between the young person and clinician. It aims to assist the young person to plan and develop a complete set of strategies for changing their cannabis use and maintaining the change in the long term.

Outline of session

Aim: to build rapport, orientate the young person to the intervention and provide an overview of the content of the session.

Procedure: Prior to introducing the intervention, time should be spent building rapport with the young person and assisting them to feel comfortable.

Give the young person a brief outline of the rationale of the treatment. It should be explained that the treatment involves the learning of specific skills or techniques that will assist them in making changes to their cannabis use and maintaining those changes over time. It is about learning new skills and unlearning some old ones. The young person should be made aware that the treatment is not an easy "magic bullet" but will require them to do some work in order to change their cannabis use. The work they put in, however, will be rewarded. Emphasise that change is possible.

It should be indicated that the intervention involves a simultaneous emphasis on the young person's thoughts and actions (or behaviour), and the inter-relationship between these factors.

The clinician should outline the specific components of the intervention that will be covered in the session, and indicate how these will assist the young person in changing their cannabis use. These components are:

- Enhancement of motivation
- Exploring reasons and motives for smoking
- Recognising personal triggers for smoking
- Setting goals and planning for change
- Managing withdrawal
- Dealing with cravings/urges to smoke
- Relapse prevention techniques

Wherever possible the specific strategies discussed during the session should be illustrated with concrete examples based on material provided by the young person. Throughout the session feedback should be sought from the young person regarding their thoughts, feelings, and understanding of the ideas discussed.

Level and pattern of cannabis use

Aim: provide the young person with a profile of his or her cannabis use and level of dependence, and re-examine reasons for smoking and change.

1. Dependence.

Introduce the concept of dependence, and the fact that it can have both physical and psychological aspects to it. Make clear what is meant by dependence with a brief overview of each of the diagnostic criteria.

- Tolerance
- Withdrawal symptoms
- Using more or longer than intended
- Persistent desire to use and/or unsuccessful efforts to control use
- Great deal of time spent obtaining, using, and recovering from cannabis use
- Giving up or reducing important activities
- Continued use despite the knowledge of physical or psychological problems

Discuss the fact the dependence is a continuum, not an all-or-nothing category. Give feedback on the young person's level of dependence using the Severity of Dependence Scale data collected in the assessment. Ask for the young person's response to this; how does that look to them, is it an accurate reflection of their situation.

2. High Risk Situations and Triggers

Introduce the concept of high risk situations and provide some examples. Point out that smoking often occurs as part of a pattern of behaviour that is reasonably consistent (e.g. in certain places, with particular people). Go on to discuss personal triggers and how these may be

external (e.g. being offered a smoke, payday) or internal (e.g., boredom, stress). Be aware that some young people may be less confident in labeling their feelings than some adults, so it may be necessary to provide examples of feelings that other young people have found to be internal triggers. Explain how triggers promote thoughts of smoking and so often lead to increased desires or urges.

Elicit the young person's experience of high risk situations and their concern about these.

Help the young person to compile a list of his or her high risk situations and triggers, being as specific as possible. Point out that knowing what your high risk situations and triggers are is an important first step in being able to deal with them.

Dealing with high risk situations can be briefly introduced at this point, but will be covered in more detail later in the session.

3. Reasons for smoking: why smoke and why change?

Begin the discussion of reasons for smoking with an acknowledgment that there are positive aspects to smoking. Emphasise the importance of the young person giving careful consideration to their own reasons for smoking. Point out that although these questions were looked at earlier (in the Feedback session) it is worth considering them further. Refer back to the assessment and feedback sessions to get the young person's verbatim responses to the questions of what the "good" and "not so good" things are:

"to keep it fresh in our minds we will briefly look at the good and not so good things about your smoking that we discussed last time".

Ask if the young person has anything they would like to add to the list, or any other changes they would like to make. Note any changes. (Use the Motivational Interviewing principles outlined above in exploring the issues, i.e. express empathy; develop discrepancy; avoid argumentation; roll with resistance; support self-efficacy).

As in the feedback session, discuss the good things with the young person and determine the importance of each. Summarise the good things and feed this information back. Have the young person rate each item (0-10) in terms of importance to them. Turn next to the not-so-good things. Again discuss each one in turn and determine from the young person the importance to them of each (e.g. "is that a problem for you", "does that bother you sometimes?"). Have them rate each item. Summarise and feed back the not-so-good things that the young person considers important.

Examine the total ratings of the good and not-so-good things, and discuss the decisional balance. Explore any ambivalence.

Again refer back to the assessment and feedback sessions to get the young person's verbatim responses regarding the good and not-so-good things about change, i.e. the young person cutting down their smoking, or quitting. Ask if there are any changes the young person would like to make to the list. Discuss each item in turn and, as above, have the young person rate the importance of each.

The time spent re-examining the good and not so good things about cannabis smoking will vary according to the young person's stage of change. For those who are clearly in the determination or action stages a brief reiteration will suffice before moving on to a discussion of practical

strategies. For those who remain ambivalent about change, some further exploration of their ambivalence may be required.

Increasing Enjoyable Activities

Aim: to generate a list of activities that will be rewarding for the young person. These will provide alternative activities to smoking, and assist the young person in coping with craving and boredom.

Procedure: Point out that the number of enjoyable activities a person engages in is directly related to the number of positive feelings they have. This means that enjoyable leisure activities may be a very useful tool for controlling negative feelings such as boredom and loneliness. Everyone wants and needs enjoyable activities in their life. For many people, a lot of time is spent meeting obligations that need to be done but aren't necessarily pleasant (e.g. housework etc). These are things we "should" do rather than "want to" do.

Explain that one of the common effects of cannabis dependency is a narrowing of focus of activities. That is, the person's involvement in activities other than smoking tends to decrease as their cannabis use increases.

Assist the young person to compile a list of activities that they find enjoyable, or have previously found enjoyable, or they would like to get involved in. Encourage them to generate as many ideas as they can.

This list can be referred back to later in the session to provide concrete examples of activities that the young person could participate in as alternatives to smoking.

Strategies for Change

Aim: to generate a personalised list of strategies that may be of assistance to the young person in changing and maintaining the change.

Procedure: Introduce the discussion of strategies for change by pointing out that change is an individual process, and the types of strategies successfully used by one person will not necessarily suit another. Different strategies may also be useful in one situation but not another. Some flexibility and experimentation may be required for the young person to find what is right for them.

Emphasise that preparation and planning are key elements of successful change. Thinking in advance about how to handle problems will make dealing with them easier when they actually arise.

Ask the young person to think back to the positive things about smoking for them. The benefits that they currently see themselves gaining from smoking will need to be addressed in order to

change successfully. That is, the young person will need new skills to replace the role that cannabis formerly played in their life. For example, if they use cannabis as a way to relieve boredom or depression, they will need to work out other ways to manage these feelings when they change their cannabis use.

Building on previous experience is useful. Refer back to the assessment data to find if the young person has attempted to quit or cut down before, and if so, how they went about it. Discuss any previous attempts to change and how successful they were. Note down any strategies the young person found helpful in the “Your Own Strategies” section of the booklet.

Present the following list of strategy suggestions and briefly discuss them. Seek further ideas from the young person.

- Before you smoke – think about it – practice distracting and delaying
- Plan ahead: think about what you will do instead of smoking
- Remind yourself of why you want to change
- Remind yourself of the benefits of not smoking
- Do enjoyable things that don’t involve smoking
- Ask a friend or relative for help: tell them about your plans and strategies for change
- Avoid high risk situations and people who smoke
- Practice urge management skills
- Spend more time with people who don’t smoke.

Work with the young person to compile a list of as many strategies as possible.

Dealing with High Risk Situations

Aim: to raise the young person’s awareness of high risk situations and personal triggers, and generate strategies to cope with them.

Procedure: Review the young person’s high risk situations identified earlier, and reiterate the role that these situations play in eliciting urges to smoke.

Explain to the young person that, given the strong cravings associated with high risk situations, one of the best ways to deal with them is to avoid them; particularly in the first few weeks after they have quit or cut down. Advise them, for example, to avoid visiting friends whom they know will be smoking at the time. Temptation is almost certain to arise, and it can be very difficult to deal with in the early stages.

Explain that this doesn’t mean permanently cutting ties with their smoking friends, just avoiding a high risk situation while they are particularly vulnerable.

Acknowledge that not all high risk situations can be anticipated or avoided (e.g time of the week; certain mood states). Remind the young person that planning and being prepared for these situations will help them deal with them, if it is not possible to avoid them. For example, boredom can be dealt with by having a plan of activities to do when the feeling arises.

Go through the young person's list of high risk situations and assist them to generate a list of strategies to deal with each of them. Write these in the young person's booklet.

It is also useful for the young person to have an "all-purpose" plan for dealing with unexpected or especially difficult situations. Present the following as an outline of an all-purpose emergency plan:

1. I will leave or change the situation or environment
2. I will put off the decision to smoke for 30 minutes. (I know that cravings are short term. I'll wait it out.)
3. I will change my thoughts about smoking (do I really need a smoke)
4. I will think of something unrelated to smoking
5. I will remind myself of my success to this point
6. I will call someone I trust and talk about it.

Cravings: Urges to Smoke

Aim: to educate the young person on the genesis and time course of craving, and to work with the young person to prepare strategies for coping with them.

1. Understanding cravings

Begin this section with an overview of cannabis craving. Prompt the young person to recall their past experiences of cravings and how they build up over time. Indicate that cravings are reinforced by the effects of the drug on the reward centers of the brain. Cravings are triggered by cues for drug administration; remind the young person of his or her personal triggers, and discuss how these will tend to induce cravings.

Emphasise that cravings are normal in people who are quitting or cutting down their smoking. Cravings do go away, but they may be quite strong for a while immediately after quitting or cutting down.

2. Cravings are time limited

To explain the time limited nature of cravings, convey the following to the young person.

"Cravings to have a smoke rarely last very long. In fact, they almost never last more than about 30 minutes. This is true for everybody, although few smokers give themselves the chance to prove it".

Ask the young person whether they have ever had a strong craving, but were for some reason unable to smoke. Next ask about whether the craving passed. (Most will have had this experience). This is intended to improve the young person's self efficacy for riding out cravings, and allows them to identify waiting-it-out as a useful strategy that they can use. The main message is that cravings do not have to be acted upon.

3. Handling Cravings/urges

- *“Urge surfing” and non-reinforcement of cravings.*

Introduce the young person to the analogy that cravings/urges are like waves. They reach peak intensity then subside.

“Cravings or urges usually come and go in waves. So, if they are feeling intense, try to distract yourself for a while and soon you will notice that the worst part has passed. Imagine the wave rising up to its peak level, and then it will pass you by, leaving you feeling more comfortable and no longer in need of a smoke. This is called “urge surfing”. You will feel good when the urge wave has passed and you didn’t have to act on it by smoking.”

Urges are continually being reinforced when cannabis is smoked in reaction to them. Resisting smoking in the presence of a craving will help to weaken the craving via the process of extinction. (Illustrate this to the young person with the “stray cat(s)” analogy).

- *Distracting*

Distracting works on the principle that cravings are thoughts, and thoughts can be changed. The easiest way to change thoughts is to change the behaviour that is currently occurring. By getting involved in some activity that is unrelated to smoking the young person’s thoughts will be removed from smoking and focused on the new activity. Suggest that the young person might try: taking a walk, phoning a friend, or engaging in one of the enjoyable activities they listed earlier. This will help pass the short time during which the craving is active.

- *Delaying*

Delaying is related to distraction and works on the assumption that cravings are time-limited and they will abate over time if not acted upon. Advise the young person that if they are about to give in to an episode of serious craving, they should check the time and make a personal commitment not to smoke for at least half an hour. During this time, ask the young person to engage in distraction. After the half hour is up they should decide whether having a smoke still seems necessary. It will usually be the case that having a smoke will not be as important as it was earlier.

- *Decatastrophising*

Explain that in this context decatastrophising simply means keeping the experience of craving in perspective. Ask the young person to think about the feeling of craving and compare that to other uncomfortable feelings, such as a bad case of sunburn or severe anxiety. Suggest that the young person avoid becoming overwhelmed by craving by reminding themselves that cravings are not unbearable, just temporarily uncomfortable. Encourage the young person to ask themselves such questions as: “is the craving really unbearable”, “is it the worst thing that could be happening”, “how does it compare to bad sunburn”, before they act on the craving and have a smoke.

- *Recalling the negative consequences of smoking*

Often when experiencing craving people tend to remember only the positive effects of smoking; they often forget the negative consequences. It can be effective for them to remind themselves of the negative effects smoking and the benefits of not smoking.

- *Avoiding*

Remind the young person avoiding (or leaving) situations with strong personal triggers is a useful way to minimise craving. If they persist in sitting in front of the TV, surrounded by people smoking, or other strong personal triggers, they will only increase the effect of those triggers on their craving.

Reiterate that cravings diminish over time. “You win every time you overcome a bout of craving it makes the craving weaker next time and improves your confidence in your own ability to resist”.

Seemingly Irrelevant Decisions (SIDS)

Aim: to provide understanding of Seemingly Irrelevant Decisions and their relationship to high risk situations. To identify examples in the young person's life, and encourage the young person to think through each decision they make and where it may lead them.

Procedure: Seemingly Irrelevant Decisions refer to those decisions that move a person closer to, or into, high risk situations. Cannabis smoking can, over time, become over-learned and automatic; smoking can occur without any real higher conscious effort. Some people may find themselves repeating old behavioural patterns without realizing that they are putting themselves in danger of a high risk situation. Becoming more aware of the implications of seemingly irrelevant decisions on the likelihood of smoking will assist the young person to avoid high risk situations or prepare for them. The following outline may be useful to introduce the idea to the young person.

“Having a smoke can happen so often that it becomes automatic. It can seem to happen without any real effort or conscious decision. There are lots of small steps in the chain of events that leads to you having a smoke. Some of the obvious ones are getting out the stash, mulling up, packing a cone or rolling a joint. But there are lots of little steps that lead up this point. They may be things like making time to prepare for having a session, sitting down in a certain room, or being with certain people”.

“In some cases the chain of events starts hours before you actually have a smoke. Often without thinking about it, many people make **seemingly irrelevant decisions** that take them along a path to a high risk situation, and then to a smoke. That is, through a series of minor decisions you may gradually work your way closer to the point at which smoking becomes very likely.

Ask the young person whether they have ever tried to avoid smoking only to find that they ended up in a situation where it was impossible to resist. They may have been tempted by other

people, or they may have unintentionally exposed themselves to internal triggers such as boredom or stress, which set off a chain of events that led to smoking.

Being aware of the impact of seemingly irrelevant decisions is important. Point out that if the young person can get themselves into the habit of recognizing all the small decisions they make every day, and thinking through the safe versus risky consequences of those decisions, they will be less vulnerable to high risk situations. Trying to minimize temptations well before they grow into high risk situations will help the young person achieve their goals.

When making decisions, whether large or small, suggest that the young person do the following.

1. Consider the options they have.
2. Think ahead to the possible outcomes of each option. Consider the positive and negative consequences might there be, and what the risk are of each leading to relapse.
3. Select one of the options:
Choose one that will minimise their risk of smoking. If they decide to choose a risky option, plan how to protect themselves while in the high risk situation.
4. Watch for “red flag” thinking – thoughts like:
“I have to....” (do something, go somewhere, see someone) *or*
“I can handle....” (a certain high risk situation) *or*
“It doesn’t really matter.....” (if I just have one smoke)

Ask the young person to make a list of SIDS they know they have made in the past. Also ask them to think of a few likely SIDS that they could see themselves making in the future.

Withdrawal Symptoms

Aim: to provide an outline of the type, intensity, and longevity of withdrawal symptoms which may occur, and give advice on how to cope with them.

Procedure: Begin by pointing out that although not everyone experiences them, there can be some withdrawal symptoms associated with the cessation of cannabis use. Although these may be uncomfortable for a while, they are not dangerous.

Reframe the withdrawal symptoms in a positive light; point out the symptoms are actually signs that the body is recovering and adapting to being without cannabis. So, they can be seen as positive signs of progress toward recovery.

Briefly review commonly reported withdrawal symptoms (e.g. irritability, insomnia, trouble concentrating, restlessness etc), and emphasise the short term and relatively minor nature of these symptoms. Point out that it is impossible for the symptoms to last very long.

“Don’t worry, these symptoms are usually quite mild, and gradually disappear over about 7 to 10 days”

Advise the young person to look after their general health during the withdrawal period (if any). That is, try to eat well, drink plenty of water, get some exercise, and try to establish regular sleeping patterns.

Suggest the techniques of distraction, delaying, decatastrophising, and de-stressing as helpful ways of dealing with symptoms.

Doing it: setting goals and making the change

Aim: to negotiate a specific goal for change and have the young person commit to a date for change.

1. Change Goal

Having discussed various strategies for change and skills for coping, the young person should now be asked to make some decisions about short-term goals for changing their cannabis use.

Ask the young person what their immediate goal for change is. Do they intend to quit or cut down to a set level or pattern of use? Advise the young person that even if they chose to cut down as a long-term, it can be useful to have a period of non-use before attempting controlled use. Give reassurance that stopping smoking is never as difficult as it seems at the beginning. Support a goal of abstinence but don't try to impose it.

Have the young person write down their goal for change (i.e. abstinence or controlled/recreational use). If controlled use is the preferred goal, ensure that the details of what this will mean are clearly spelt out. For example; to smoke no more than once per week and to smoke only when offered; or strictly Friday nights only.

2. Method of Change

Whether the young person should opt for sudden or gradual change will depend largely on their motivation and level of dependence. If their level of dependence is severe, they might want to consider cutting down first over a few days prior to stopping completely. For those who want to taper their use suggest that they gradually delay the time of day of have their first smoke by 4 – 6 hours each day, and count the number of cones they use and reduce this by 20% each day.

For young persons with low to moderate dependence, suggest that quitting “cold turkey” might be the best option. This means they can get on with it immediately and avoid the hassle of working out how to gradually reduce their use.

Advise the young person to use their own experience as a guide. If they have had some success before with one method try using that again.

3. Change Date

It is important that the young person nominate a specific date for change. Ask the young person to choose, and commit to, the date that they are going to make their change. Point out that if they don't set a specific date they may never get started. Write down the young persons change date.

4. Preparing Mentally

Indicate that while changing habits of cannabis smoking may not be easy, it is certainly not impossible. Being aware of trouble spots and planning ahead will make it easier.

Remind the young person that people who have changed their use often say that it was not as bad as they thought it would be. It is the belief that it is going to be really hard that puts people off and makes the job harder. Ask the young person for any comments they have about the process of change, and evince confidence in their ability to succeed.

Relapse Prevention

Aim: to discuss common pitfalls that may lead to relapse and suggest ways to deal with them effectively.

“Relapses” and “slips”

Introduce the distinction between a “relapse” and a “slip”, i.e. a “relapse” is a return to previous levels of cannabis use, a “slip” is an isolated case of having a smoke, which does not necessarily have to lead to a full relapse.

Point out that it is quite common for people to make mistakes when they start out learning a new skill. Changing cannabis use is no different, and occasional mistakes may be made.

It is important that the young person knows that if they do have a slip this doesn't mean they have failed, or are unable to change, or must have a full relapse. Emphasise that catastrophising over a slip (e.g. “I had a smoke, I can't stop, I'll never be able to give up”) can itself lead to relapse.

What is important to long term success is how the young person handles the slip. How to handle it will depend on how it happened. The slip may have been intentional or unintentional.

- *Intentional slips*

“Slips can happen “on purpose” for a couple of reasons. You may tell yourself that you are tired of sticking to your plan and want a night off. Or you may decide that you deserve a reward (a smoke) for working so hard”.

If the young person does slip purposely they should think carefully about their reasons for wanting to change, and how important these are to them. Advise them that, if they do slip in this way, each slip will reduce their chances of long term success. It will result in their craving returning more strongly, which means more hard work.

- *Unintentional slips*

Slips may occur despite the young person's best intentions, because they found themselves in a high risk or tempting situation with their guard down. If so, they should look at their strategies to see what can be improved. Was there a SID made along the way? Are they finding some high risk situations too hard at the moment? How can these situations be dealt with more effectively? Thinking about what happened and why will make it easier to avoid the same mistake next time.

Tell the young person that the best thing is to get back on track as soon as possible, and stay positive about their ability to handle it in the future.

Plan for dealing with a slip

A slip can feel like a crisis, and it's useful to have a pre-prepared plan for coping if one occurs. Go through the plan below with the young person.

If I have a slip:

1. I will get rid of the cannabis and get away from the setting where I lapsed.
2. I will realise that one smoke or even a day of smoking doesn't have to result in a full blown relapse.
3. I will not give in to feelings of guilt or blame myself because these feelings will pass.
4. I will call for help from someone I trust.
5. I will look at the slip to see what triggers there were and my reaction to them.
6. I will think about what I expected cannabis to change or provide.
7. I will set up a plan for coping with similar situations in the future.

Remember: a slip is only a set-back, it doesn't mean failure.

Rationalisations

Rationalisations are an important potential relapse precipitant which often arise as a result of negative, irrational thoughts. They may result from old automatic thought processes, and the young person needs to be aware of them to be able to deal with them effectively. Convey the following idea to the young person:

“You may find that sometimes your mind seems to play tricks on you; it's almost as if it's trying to get you to have a smoke. These thoughts are rationalisations, and they seem to automatically make excuses for having a smoke immediately. These can be a real threat if you don't recognise them. Common ones include:

‘it's a special occasion’; ‘I've had a really hard week’; ‘just one last smoke’. You can probably think of a few others.”

Prompt the young person for their experience of rationalisations. Indicate that rationalisations are a common means by which relapse can occur, and being able to recognise them is important

for dealing with them. Advise the young person that if they notice they are beginning to rationalise, they should clearly point that fact out to themselves (i.e. “I rationalising”). This should be followed by a strong positive statement to themselves, affirming their decision to change and the importance of their desire to be successful.

Separation loss or anxiety

It is common for people giving up smoking to say that it feels like they are losing a good friend. It may be like this for the young person. If cannabis has been a big part of their life, they may feel that there is a gap once they have stopped using. Seek feedback from the young person about this, and explore possibilities for alternatives to fill the role cannabis currently plays in their life.

Provide reassurance that these feelings do pass, although it takes time. Encourage the young person to focus on thinking positively about the future. They will discover new possibilities and opportunities over time as they focus less on smoking.

Self monitoring

Self monitoring provides an effective way for the young person to maintain their focus on change. It can also help slow down the sometimes “automatic” nature of the processes that lead to having a smoke. Advise the young person that self monitoring will help keep track of their commitment to change, and will show up any patterns of problems they may have with cravings, situations, and smoking.

Provide the self monitoring form and suggest that each day the young person fill it in with ratings of the strength of any cravings they experienced; the situation these occurred in; moods or feelings that accompanied the craving; the outcome and the amount smoked. Explain the “mastery rating”, i.e. “your mastery rating refers to how successful you felt in handling the situation. It is rated from 0 (“not at all successful”) to 10 (“completely successful”)”.

At the end of the week the young person should check back over the form to see how they did. This will allow them to identify problem situations, thoughts, or feelings. It will also provide evidence of their successes in dealing with difficult situations.

Point out that if the young person made mistakes or had problems, this is not a disaster; they should stay positive. Advise them to look at the mistakes and learn from them. It might be necessary for them to try different strategies to avoid making the same mistakes again next time.

Self Rewards

Often people feel that they deserve a reward for the hard work of changing their cannabis smoking, and the best reward is, of course, a smoke. Advise the young person to be aware of this temptation because it is a major pitfall.

Help the young person generate a list of alternative rewards (e.g. spending some of the money saved from not buying cannabis). Having options for alternative rewards ready in advance will help short-circuit the processes of automatically thinking of (and having) a smoke.

The Future

Aim: to explore the young person's goals and aspirations and place their cannabis use within the context of these larger life goals.

Ask the young person to think back to our earlier session when we looked at their goals and plans for the future. Have them consider the things they want to achieve and what they would like to change or improve. Note them in the young person's booklet.

Ask about the role they see that smoking has, or does not have, in helping them achieve their goals? Suggest that looking at the changes in their smoking habits in the larger context of what you want to do can help maintain the changes they have made.

Point out that the young person is fully capable of achieving their goal of change if they wish. When have succeeded in changing their smoking the possibilities of new opportunities and a new lifestyle will be there for them.

FOLLOW-UPS

THREE MONTH FOLLOW-UP

A database will be maintained containing information on dates of follow-up appointments for each participant. These should have already been scheduled by the clinician. This session will be conducted by a research assistant “blind” to the experiences of the participant (i.e, whether allocated to the RCT and if so, what condition they were in). The research assistant will be provided with names at appropriate times in order for them to confirm/reschedule the 3 month follow-up with each participant

It should be noted that when a CO and a corresponding young person participate, the CO’s “3 month” follow-up is not strictly 3 months after their assessment, but 3 months following the last participation of the young person. As the young person may not complete the Check-up until several weeks after the CO’s assessment (i.e., may complete assessment, feedback and strategies session), it may be more like a 4 month follow-up for the CO. However, it is important that we assess experiences in a comparable time period, so the CO’s follow-up will be pegged to that of the young person. Obviously, where a young person does not participate, the CO will have their 3 month follow-up 3 months following their assessment.

Duration: 30-60 minutes

What you will need for this session

- 1 Follow-up form (young person/CO)
- 2 Equipment for collecting urine sample from young person
- 3 Follow-up Contact Form (to confirm/update details)

This session will be an abbreviated version of the baseline assessment, containing items intended to assess any changes in the behaviour and circumstances of the young person and CO.

Follow the assessment form, probing carefully for any changes in their circumstances, behaviours or attitudes.

Collect a urine sample from the young person and remind them they are in the draw for a department store gift voucher. Collect up-to-date details for 6 month follow-up

SIX MONTH FOLLOW-UP

As per 3 month follow-up.

NB: No urine sample is collected at this time.

GENERAL ISSUES

CONSENT

Parental consent to participate is not required for participants aged 16 years and over. Parental consent will be sought for participants aged 14-15 years. However, where no appropriate or interested/willing family member or support exists, and the young person wishes to participate, parental consent is waived. In this instance, the consent of the relevant 14-15 year old will suffice. This waiver has been approved by the Human Research Ethics Committee at the University of New South Wales.

Please note if a consent waiver has been used on the young person's file.

CLINICAL DOCUMENTATION/RECORD KEEPING

Each participant will have a file kept in a numbered/coded manila folder. This will contain all relevant information, excluding consent forms, which will be stored separately. Each folder will contain the telephone screen, baseline assessment and output from Check-up sessions (including any clinical notes taken and clinician checklists), output from RCT (if participated), the Check-in assessment, urine results and audiotapes. The CO's file should be returned as soon as possible following their assessment session, and the young person's file as soon as possible following the 1 week check-in call. These files will be located centrally at NDARC to ensure all relevant data coding can commence and follow-ups can be confirmed.

In order that good records are kept, a clinical database will be maintained containing data on clients' compliance and attendance issues. The inside front cover of the file will contain a grid which should be completed throughout their participation, on which you should mark the date of scheduled appointments, whether they attended, how many sessions they attended, attempts to reschedule and so on. There will be a space for you to write notes regarding compliance issues below. These data will be entered into the database so that they can be described in our results. They will provide important information relevant to the attractiveness of the intervention and factors associated with retention and outcome, so it is very important these data are collected.

A separate file has been designed to track participants throughout the study.

Please take clinical notes where you believe they are relevant. There is space for some note-taking in the paperwork for each session, and extra pages will be provided. Please date any notes you take.

TAPING PROTOCOL

Fifty percent of the following sessions will be audio-taped:

- Session Three: Personalised feedback
- RCT session

Each clinician should tape every second client and note this on the file. This information will also be kept centrally. Sessions will be rated for treatment fidelity on a 1:10 basis by an experienced, independent clinician, according to specified criteria. These will complement the forms completed by the clinician after these sessions, indicating which components of the Check-up they delivered.

Because of the importance of the taping, it is essential that all sessions be taped in their entirety (obviously after obtaining permission!). You should start taping immediately upon greeting the participant and not stop taping until the participant leaves the room.

You should clearly explain that: (i) the purpose of taping is for quality control and the monitoring of clinician behaviour only; (ii) only project staff will listen to the tapes, and (iii) the tapes will be destroyed when they have been checked. If the participant declines to be taped, ensure them that this will not affect their eligibility to participate (note refusal on the file). Ensure the recorder is placed to adequately record both voices. Use clinical judgment when sensitive or illicit activities are being discussed (you may need to stop taping in some instances, or if asked by the participant).

CLINICIAN CHECKLISTS

You will be required to complete a Clinician Checklist after the following sessions:

- Session One: CO assessment
- Session Three: Personalised Feedback
- CBT session in RCT

These are intended to document each of the key components you delivered during each session. The Checklist will differ according to the session delivered. Each will contain questions relating to all possible deliverable components in that session, so depending on the circumstances it is not expected that you deliver all the components listed on the form. In other words, at the end of the relevant session, only complete the sections that are pertinent to the intervention/session that you delivered. These forms are attached in Appendix D.

Since your ratings will be compared to those of the independent clinician (with the exception of Session One), it is important that you complete the checklist carefully and according to the following guidelines:

- | | |
|-------------------------|--|
| 1 (not at all) | indicates the component was not delivered in that session |
| 2 (a little) | indicates the component was present, but only briefly mentioned and not covered in depth or with great frequency |
| 3 (somewhat) | indicates the component was present with some frequency, but not covered in real depth |
| 4 (considerably) | indicates the component was present with both frequency and depth, that it was fully covered in great detail |
| 5 (extensively) | should be used rarely, that is, only where the session was dominated by that component |

In general, most components used during sessions should be rated as **2** or **3**, and ratings of **4** or **5** should be comparatively rare and used only when a particular component truly characterises the bulk of a session.

SUBJECT IDENTIFICATION PROTOCOL

Each participant will be assigned a unique identifier, with family members linked by complementary codes. When a person contacts the Check-up, they are assigned a 7 figure alphanumeric code comprising a combination of 3 items: a 2 digit code representing the initials of the screener, a code representing if the participant is a CO/young person (CO/YP) and a number (up to 3 digits).

An example would be if Joe Bloggs screened his 10th CO for the study. This person's identifying code would be: JBCO010. If that person subsequently engaged a young person into the study, that person's code would be: JBYP010.

As it is likely that many more people will be screened than actually participate, the code representing the number of the participant may exceed 300 (the target sample).

It is not important if the screener is not also the clinician, as information on the clinician's identity will be obtained from the baseline assessment.

CONTACT PROCEDURES

Remember to note all contacts with the participants in the front of the file, including reminder calls.

The research assistant employed to conduct follow-up interviews will be required to contact each young person and CO to confirm/reschedule previously made appointments or to schedule a follow-up for those who did not previously make a time.

A list of current follow-ups at any given time will be provided to the Research Assistant approximately 10-14 days prior to the 3 month due date, so that the participant can have the appointment scheduled/confirmed. If the participant is unable to be contacted or fails to attend the appointment, a limit of 6 further calls will be made past the due date. If these are unanswered, a maximum of 2 letters will be written. An assessment window of 6 weeks beyond the due follow-up date will be set. If the person cannot be contacted by that time they will be deemed lost to follow-up.

Follow-up contact details should be completed on the appropriate form at the end of the assessment and updated after the last Check-up session (feedback or RCT), and the 3 month follow-up. These allow for contact for the 3 month and 6 month follow-ups, respectively.

Please complete the following information on the form:

- The client's current contact details
- 2 contacts for when things are going well
- 2 contacts for when things are not going well

Contacts should be people the participant is confident can be contacted according to the details provided in 3 months' time.

URINE COLLECTION/STORAGE

Collect urines in the jars provided. Complete the label beforehand according to the example below. Complete the request form and place it in the outside pocket of the specimen bag. Make sure you note any medication they may be taking as some medications can affect the accuracy of the urinalysis. Place the urine sample in the specimen bag. Store the sample in the designated fridge at NDARC. These urines will be delivered to the lab once or twice a week and the results faxed back as they become available. This will allow the majority of them to be available for the feedback session.

Client Initials: _____	ClientID: _____
Research ID: <u>NDARC Can-Ck</u>	Specimen: <u>Urine</u>
Analysis: <u>Carboxy-THC level and ratio</u>	
Date: _____	Time: _____

REFERRAL ISSUES

All clinicians will have a current list of referral sources, which can be used at any time throughout the Check-up.

Please refer if the participant requests it, or if you feel they need to talk to someone about issues beyond the scope of the Check-up.

As noted in the section of the manual devoted to Session One: CO, the extent to which we will become involved in family issues is limited. If issues arise directly relevant to the young person's cannabis and are easily addressed in the session, you may be able to address these. For example, if the parent is modeling drug use to the young person or communicating in a way that may hinder changes to use, you may work on replacing these behaviours with more positive ones. If a parent is behaving in a way that is supportive and conducive to change by the young person, offer them support and reinforce what they are doing. However, if there are more complex or intractable issues involved, it is not our role to provide family therapy. Please provide the participant with a referral to an appropriate service if they request it or suggest one if you believe it may be beneficial.

MANDATORY REPORTING ISSUES

Information disclosed

Information about child abuse or other risk of harm, or plans to seriously hurt self or others could be revealed during this research only if a participant volunteers the information during the sessions. The interview questions and questionnaires administered in the study do not specifically enquire about child abuse. Some of the questionnaires do enquire about intentions to hurt self or others – these are the Brief Symptom Inventory, administered during the baseline assessment, and the Cannabis Problems Questionnaires and mental health diagnostics administered during the RCT.

The Brief Symptom Inventory (BSI) contains 6 items measuring depression and suicidality (items 9, 16, 17, 18, 35 and 50) and 5 items measuring hostility (including those indicating a desire to cause harm to others: 6, 13, 40, 41 and 46).

Likewise, the Cannabis Problems Questionnaire and mental health diagnostics from the RCT may indicate clinical symptoms. The mental health diagnostics provides a guide of severity below the scoring information.

In these cases the risk to self or others needs to be further evaluated. This is particularly the case if any of the questions in the BSI or the mental health diagnostics specifically addressing suicidality/homicidality are reported.

Adolescent Check-up staff will comply with reporting procedures and provide additional assistance and referral in the event child abuse or intentions to hurt self or others is disclosed. All staff members who interview participants will be informed on what is reportable and the reporting and referral procedures for the disclosures. Any incidents (whether reportable or of concern) should be reported to senior project staff, at the time they occur if necessary.

How to deal with the disclosure of child abuse or other risk of harm during the session

You are required by law to make a report to the Department of Community Services (DOCS) when you suspect, on reasonable grounds, that a young person is at risk of harm.

According to the Children and Young Persons (Care and Protection) Act 1998, a young person is “at risk of harm” when they experience the following or when it is likely that one of these things will happen to them:

- their basic needs are not met (e.g., food, shelter, clothing)
- their psychological needs are not met or they are being treated in a way that could lead to psychological damage
- they do not have access to required medical care
- they are experiencing physical or sexual abuse or ill-treatment
- there is domestic violence at home that could result in physical or psychological damage to the young person
- they are homeless and this has put them at risk

1 If child abuse or other “at risk of harm” information is revealed, stop the session and inform the participant that this issue will be discussed further after the session. If the discussion cannot wait, the interview will be discontinued at that point.

2 Prior to further discussion of this issue, inform the participant that you are required to make a report to the Department of Community Services.

3 Also inform the participant that another option would be for the participant to call DOCS themselves and make the report. If the participant chooses to call, it will be done at that time. You will then complete the session, if it was interrupted, provided the participant is able and willing to do so.

How to deal with the disclosure of plans to seriously hurt self or others

1 If information is revealed to you that a participant has plans to seriously hurt themselves, stop the session and inform the participant that this is an important issue that you need to discuss further. Tell the participant that we may call a crisis clinic or a mental health professional or other authorities ourselves, as needed or required by law.

- 2 If a participant's score on the BSI indicates significant depressive symptoms, discuss this with the participant, immediately if possible, about your concerns and get more information from the participant.
- 3 In either of these cases, a project member will evaluate the seriousness of the participant's plans to determine the most appropriate action to take. This may include making referrals and calling a crisis clinic, a mental health professional, or other authorities as necessary to protect the participant and/or other individuals.
- 4 Have the participant complete the session, if it was interrupted, provided the participant is able and willing to do so.

If you do not feel capable of handling either of these situations, immediately contact your supervisor.

The CO/parent/carer will need to be informed if they are being reported to DOCS, or if you believe the young person is at serious risk of self harm/harming others.

Appendix B: Adolescent CCU Time Line Follow-Back (TLFB) Questionnaire Procedures

1. Overview

Over twenty-five years ago, the TLFB was developed as a procedure to aid recall of past drinking. It is a straightforward manner in which to assess drinking by asking participants to recall as accurately as possible the number of days they consumed alcohol and the amount they consumed on each of those days. The TLFB for the Cannabis Check-Up will be tailored to permit collection of cannabis use frequency at baseline and at follow-up. The TLFB method presents participants with a calendar and asks them to provide retrospective estimates of their daily cannabis use. The ultimate goal of using the calendar is to gather detailed and accurate data about self-reported cannabis use over the specified time period.

2. General Instructions

It is estimated for this participant population that it will take about 15 minutes to gather information at the baseline and follow-up time periods for cannabis use. Several memory aids have been developed to help with participant recall when completing the TLFB. These include:

1. A Daily Calendar
 - * primary aid that assists in recall of cannabis use
 - * standardised calendars will be used
2. Key Dates
 - * idiosyncratic happenings
 - * newsworthy events
 - * daily events
3. Black and White Dates
 - * identify periods of invariant behavior or extended abstinence
4. Anchor Points
 - * identify drug use or drinking behavior that anchors each event
5. Discrete Events
 - * specific events to identify periods of use or nonuse
 - * arrests
 - * hospitalisation
 - * illnesses
 - * treatment
6. Boundary Procedures
 - * establishes upper and lower limits for reporting frequency of use
 - * the most or least amount consumed on a single day during the period
7. Exaggeration technique
 - * provides a minimum and maximum value to avoid “a lot” or “a little”

A common reaction among participants who have not previously completed a TLFB has been to consider it a formidable or even impossible task. You should make it clear to the participant that the calendar will be used as a memory aid, and that his/her cannabis use will be remembered by linking these memory aids to his/her behavior. Use of the calendar should invoke the participant's retrospective recall of daily cannabis consumption by linking these

memories to other specific, salient life events that also occurred during the time interval. In order to establish these anchor points and key dates it is important to give the participant as many probes, ideas or suggestions as possible and then allow the participant enough time to search his/her memory and think about these cues or probes from the interviewer. The interviewer should make use of regular as well as singular events to prompt the participant in detailing both regular use patterns and episodes that represent exceptions to the pattern. The regularities in the participant's life (e.g., school schedule, payday) can and should be used to provide a context for filling in the calendar.

3. Specific Instructions

Frequency/Quantity:

The purpose of the TLFB will be to gather cannabis use frequency and quantity data for each day of a fixed time window. Frequency is defined by the number of days cannabis was used in the period. Frequency scores will be summed for each week in the period and will be data entered as weekly rather than daily measures. Quantity of use for cannabis (i.e., number cones of cannabis used) will also be reported as a weekly measure, and will be collected during the interview along with the frequency data.

Frequency

For **cannabis** use, frequency is defined as use or non-use for a particular day. If the participant used cannabis on a given day, the M-box at the bottom of the relevant day on the calendar should be circled.

Quantity

For **cannabis**, quantity is defined by the number of cones (or joints converted to equivalent cones: 1 joint=3 cones) per week that the participant used during the fixed time period. For each day on the calendar in which the M-box has been circled, the small box next to it will contain the amount of cannabis used, in joints, cones or other units.

Assessment Window

The time period for the primary data collection points for the TLFB will be defined as fixed windows (i.e., 90 days at baseline, and 90 days at the 3-month follow-up). However, at the 3-Month follow-up, in an effort to gain more accurate information for the TLFB Summary Sheet, the participant should be asked to recall major events and any changes in cannabis use patterns that have occurred since their assessment. This will be accomplished by recording on the TLFB calendar those events and general changes in use patterns, beginning with the day of their assessment. Daily measures of frequency will not be obtained, however, for this time that precedes the 90 day follow-up period. We simply want to encourage the participant's recall of any possible changes in cannabis use.

In summary, at the 3-month follow-up, the participant will be asked to recall information beginning the day of the participant's baseline assessment and ending the day before the 3-month assessment. Only for the 90 days prior to the day of the 3-month assessment should detailed, daily quantity data be collected, scored, and entered. The Anchor Dates and methods for computing them are shown below.

Anchor Dates for TLFB

Baseline Interview

STARTING DATE FOR CALENDAR: 89 days before yesterday

STARTING DATE FOR DATA ENTRY: 89 days before yesterday

ENDING DATE: Yesterday

METHOD FOR COMPUTING START DATE FOR DATA ENTRY:

Looking at the calendar, place your finger on “yesterday,” count back exactly 13 weeks staying on the same day of the week as “yesterday.” When you get back 13 weeks, cross out (X) that day and the next day. The following day is your starting day for the 90-day period.

3 month Interview

STARTING DATE FOR CALENDAR: 89 days before yesterday

STARTING DATE FOR DATA ENTRY: 89 days before yesterday

ENDING DATE: Yesterday

METHOD FOR COMPUTING START DATE FOR DATA ENTRY:

Looking at the calendar, place your finger on “yesterday,” count back exactly 13 weeks staying on the same day of the week as “yesterday.” When you get back 13 weeks, cross out (X) that day and the next day. The following day is your starting day for the 90-day period. Looking at the calendar, put an X on the day of the baseline assessment. The first day is the day following the baseline assessment. The last day is the day before the 3-month follow-up assessment (i.e., Yesterday).

A similar procedure is used for the 6 month follow-up.

4. Calendar Form

When conducting a TLFB interview, it is necessary to have a calendar form for recording data. The calendars will include a grid, containing a box labelled “M” for cannabis, and a small box next to this for adding the quantity of cannabis used. The rest of the box for each day will be used for other kinds of information:

- The top portion of the calendar day-box should be used for recording key dates and discrete events to be used as memory aids by the participant.
- If cannabis is used on a particular day, the “M” should be circled.
- If cannabis is not used on a particular day, mark the box with an X.

- There are three examples below. The first example is for the 28th day of a month. The interviewer has recorded in the day-box that the participant had an argument with his mother, and smoked 2 cones of cannabis that day.
- On the 29th, we see that the participant went to a cricket match and shared 1 joint with 1 friend (so, had ½ a joint).
- On the 30th, he had a History test, and used no substances. Every calendar day box will be filled in similarly.

28		29		30	
Fight with mum		Cricket match		History test	
M	2 cones	M	½ joint	X	

5. Conducting the TLFB Interview

The TLFB interview will be conducted early in the baseline assessment battery. In general, spans of abstinence are queried first, and recorded on the calendar. Then the interviewer determines whether there is any predictable patterning to periods of smoking. For young persons who have a reasonably consistent pattern of smoking over several weeks, this pattern may be used to fill in blocks of time on the calendar with similar use patterns. If, however, the participant has only variable episodes of smoking, and no pattern that is reasonably consistent across weeks, a more day-by-day approach will be used. The biggest clinical interviewing challenge is the filling in of cannabis information for each of the days in the calendar form. The recommended progression for accomplishing this follows these steps:

6. Introducing the TLFB Interview.

The following is a script that may be read or paraphrased to the participant before beginning the TLFB:

“I'd like to begin this interview by asking you questions about your cannabis use during the period of time from about three months ago (*or applicable starting date*) up until yesterday (*the day prior to the interview*). Place the calendar in front of participant. We will be reconstructing this time period by using points on the calendar to help you remember things that have happened to you. Then we will use these events on the calendar to help you remember when you used cannabis on each of these 90 days.

Although it sounds like a difficult task, it can be done. I will give you prompts to help you remember things. I want to remind you that everything you say here is confidential.”

7. Identify Key Dates and Discrete Events on the Calendar.

Key dates common to most participants would include holidays, birthdays, vacations, major news or sporting events, school activities (e.g., tests, sports games, etc...), paydays, family arguments, and weekends. It is important to refer to negative events that may have occurred in the participant's life as well as the positive or festive occasions. Discrete events might include dates of hospitalisations, illness or accidents, arrests and/or incarcerations, or court appearances. Reports of such events also make it possible to estimate frequency of use and opportunity to smoke (e.g., excluding days in jail, treatment, etc.).

We can start by looking at the events already marked on the calendar. For example, we see that New Year's eve, Christmas, etc. fell within this time frame.

Allow the participant the opportunity to describe whether or not these pre-marked events were important to her. "Oh, yes, I was with my family at Christmas, or I went to a big party on New Year's Eve.

What were other particularly memorable things that happened during this time period, any birthdays, accidents, anniversaries, parties, things like that *(refer to list below to assist in probing. Slowly read each of the options to the participant and allow enough time to search his or her memory).*

All events that are useful as memory aids should be recorded on the calendar by the interviewer. They should be written in the top of the boxes for each day.

8. Probes for Idiosyncratic Events

- ___ holidays
- ___ birthdays (self, family members, friends)
- ___ anniversaries
- ___ parties
- ___ illness
- ___ doctor's appointments
- ___ meetings with probation officers
- ___ accidents
- ___ hospitalisations
- ___ grounding or other home discipline
- ___ arrests
- ___ gaol time
- ___ court appearances
- ___ major school assignments or tests
- ___ beginning or termination of employment
- ___ vacations
- ___ got driving licence
- ___ relationship beginnings or endings
- ___ sporting events (football, cricket, tennis games, etc.)
- ___ major news events
- ___ concerts
- ___ plays or other school functions
- ___ bought cannabis

9. Probes for Regular Events

- ___ paydays
- ___ weekends
- ___ work schedule
- ___ school schedule
- ___ meetings
- ___ church
- ___ sports games, club meetings etc.

Once the calendar is complete with the “memorable events” recorded, the interviewer should proceed by focusing on the longest spans of invariant behavior, such as abstinence and then a steady pattern of cannabis use. For example the interviewer should say,

Looking at the calendar and thinking about these events in your life that are written on the calendar, what is the longest number of days you went without smoking at all, not even once? and then When did that occur?

As soon as the participant begins to give cannabis information, the interviewer should explain that cannabis use will be collected for each day. The interviewer should say:

I will be asking whether or not you used cannabis during each day, and how much you used. For example, I'll want to know if you used on the 1st day, etc. You just told me about these days you were abstinent so I'll cross out the “M” on these days. Continue then, by asking about other periods of abstinence. Were there any other times during this period when you did not smoke at all?

Next, determine whether or not the participant has a “steady pattern” of cannabis use. The interviewer should say,

During this period when you were using cannabis, I'd like to see if your pattern was at all similar from one week to the next, at least for a few of these weeks. I realize that cannabis use will vary from day to day and from week to week, but I want to know if there was any similarity among weeks. Was there any consistency from week to week?

If the participant has had a reasonably consistent pattern of use from week to week, then ask the interviewee to describe a typical week. The interviewer should record several weeks of the steady pattern on the calendar. The interviewer should then ask the participant to identify the weeks during the time period that fit the steady pattern. The interviewer should record the pattern onto the calendar. Begin with weekdays and then move to the weekends. Use these instructions to start:

Could you describe for me a usual or typical week of cannabis use? In a typical week, let's start with weekdays, Monday to Friday - did you normally use cannabis on these days?

This phrasing is intended to provide permission for reporting use. Alternative phrasing such as “Did you ever use between Monday and Friday?” may encourage falsification. The “weekdays” approach often works well. If cannabis use varies from day to day this can be specified. If there are particular days when this occurs, (e.g., Tuesday and Thursday) record it on those days.

Now what about weekends, from Saturday to Sunday?

Proceed through weekends to establish the weekly steady pattern. If the participant has a steady pattern of use, these days should account for the majority of days during the assessment window. What remains is to reconstruct, day by day, the participant's cannabis use on days not covered by the procedures above. It is conceivable, however, that a given participant would report no consistent steady pattern in which case the entire assessment window would be constructed one day at a time.

On the days that they smoke, record how much they smoked over the day according to their method of use – e.g., cones, joints. Convert joints to cones on the Summary Sheet (1 joint=3 cones). If they shared joints try and work out how much they actually smoked themselves. If they can't remember exactly how much they smoked, try and get an average for the days in that week of the period.

To complete the calendar days not covered by the steady pattern or abstinent days, the interviewer should focus on days immediately following salient periods (such as periods of abstinence and steady pattern use) by asking:

What happened then? How did your cannabis use change?

You should continue by focusing on the days immediately preceding the invariant period, using any anchor points that are in close proximity to these days.

The style of interviewing is important. A warm, empathic tone will encourage more honest reporting. Patience and positive reinforcement are also vital, given the amount of detail being asked for here. When an interviewee voices frustration, it is often helpful to offer an empathic reflection of the feeling, and then to reassure or refocus the interviewee (e.g., "It is difficult to say, and I'm sure that your cannabis use does vary from week to week. But do you think there were some weeks here where your cannabis use was fairly consistent from week to week?") It is also wise to thank and reinforce the interviewee for "hanging in there" with a sometimes difficult process.

In order to facilitate the participant's recall about his/her cannabis use, it is important to focus on major events that occurred during this time period which could have had an impact on the availability of cannabis and the participant's cannabis use (e.g., days hospitalized, arrested and incarcerated, etc.) You should add events to the calendar that may be revealed after the actual cannabis use interview begins. You should pay close attention to inconsistencies in the participants' descriptions of their cannabis use and ask questions aimed to resolve these differences to make sure that accurate information is collected.

Throughout the interview, you should continually focus the participant's attention on the calendar and the events depicted on the calendar. It is useful to break the calendar into months or weeks to facilitate recall of patterns and specific episodes. Even for participants with very consistent patterns, the interviewer should probe regarding the special events on the calendar that may have triggered an idiosyncratic episode.

When the interviewer is finished, there should be a mark in each box for each day, either a circle in the M-box if cannabis was used or an X if it wasn't. If the M-box is circled the adjacent box should contain the quantity smoked on that day.

12. TLFB Summary Sheet

The primary aim of using the Time Line Follow Back (TLFB) is to obtain detailed information regarding participants' use of cannabis. Although the TLFB provides us with a day by day assessment of cannabis use, individual differences in the length of time between the assessment, feedback, and follow-up sessions do not allow for a meaningful analysis of the data at a daily level. As a result, for the baseline and 3-month follow-up we will score the TLFB data in such a way as to provide weekly averages of use.

The weekly tally sheet, described below, should be used to summarise and code the calendar data. The tally sheet is important for two reasons. It will be used to enter the cannabis summary information, and it will be used to provide feedback in the personalised feedback session.

Procedures for Scoring the Baseline and 3-Month Follow-Up

For each of these assessments we will be entering data for a period of 13 weeks (90 days) prior to the day of the assessment (DO NOT score or enter the additional data prior to these 90 days). When scoring the data obtained from the participant, you should use the following procedure:

- 1) On the TLFB summary form record the participant's ID#, the assessor's ID#, the date of
- 2) the assessment, and the code for the assessment period (i.e., 0 for baseline and a 1 for three months).
- 3) In the space marked **# of days in week 1** record the number of days in the week for which the data was collected. All weeks will be assumed to start on Sunday and end on Saturday. Given that assessment sessions will not occur on these weekend days, the first and last weeks of data collection for these weeks will have less than 7 days of collected data. For example, if the first day of the 90-day period occurred on a Wednesday, you would record a 4. If the first day were on a Friday a 2 would be recorded.
- 4) Count the number of days on which any cannabis was used at all and record this number in the **# days of Cannabis Use** space on the TLFB Summary Form
- 5) Calculate the number of cones used over the week and record this number in the column head **# cones consumed in week**. If the young person did not smoke cones (in waterpipes or other pipes), convert joints to cones (1 joint=3 cones).
- 6) Repeat steps 3 and 4 for each of the remaining weeks. Weeks 2-13 should each have 7 days of recorded data.
- 7) The last week of the data collection period (the week in which you are actually meeting with the young person and collecting the data) will again be a partial week. Thus, as with the first week, you should take care when recording the number of days for which data was collected.

Appendix C: QUICK SCREEN FOR CONCERNED PERSONS

CALLERID _____	DATE: _____
STAFFID _____	CCU Contact: ____ (1 = in person; 2 = phone)

ADOLESCENT CCU QUICK SCREEN FOR CONCERNED PERSONS

Note: Before conducting a Quick Screen interview, you should have established that the caller is a person who is concerned about an adolescent's cannabis use.

I. Communicating Welcome and Establishing Rapport

It's important to take a few minutes to engage the caller. Devote enough time to this part of the call so that the caller will be ready to move on to the more structured parts.

Use reflections, open-ended questions, and then a summary.

Here are some possible prompts:

Introduce yourself and your job.

Ask for the caller's name.

How did you hear about our project?

Was there something about what you heard that made you decide to call?

Has something been happening recently that has made you feel concerned?

[NB: MAKE CERTAIN YOU ASCERTAIN THAT CANNABIS USE IS A PRIMARY CONCERN – IF NOT, THEY ARE INELIGIBLE AND MAY NEED TO BE REFERRED ELSEWHERE]

II. Informing the Caller About the Project

Introduction

Let me give you a brief description of the project and then I will answer any questions you might have. Does that sound OK?

The Adolescent Cannabis Check-up is a project conducted by the National Drug and Alcohol Research Centre, which is part of the University of NSW. It's a chance for adolescents to take an objective look at their cannabis use, including the things they like about it and the things they don't like. Over the course of 2 sessions, they have the opportunity to evaluate the role of cannabis in their life in a safe, non-judgmental environment. This will enable them to feel comfortable in making the most positive choice for him/her.

Do you know a young person that might benefit from this experience?

We also offer an opportunity for you to meet with one of our staff to discuss how to talk with the adolescent about your concerns and the project. And, we will provide you with specific information on how to do this. We hope this meeting will help you feel a little more prepared when it comes time to talk to the young person you are concerned about.

If you would like, I can go into a little more detail about the project and then I have a few questions we like to ask each person that calls. It will take about 10 minutes. Do you have time to do that now?

If yes--proceed to elaboration and QS

If no--schedule a time to complete QS

Concerned Other Session

- ◆ What we can offer you, as someone who is concerned about an adolescent, is information and the opportunity to discuss with us how you might best talk with them about your concerns and tell them about our project.**
- ◆ If you decide to participate, we will set up a time for you to come in to speak with a project staff member. (If they are not interested in coming in for a session, tell them we prefer to do the session in person. It can be done by telephone if absolutely necessary, but they will get more out of the session if they come in).**
- ◆ In this session, we will discuss with you the nature of your concerns and your relationship with the adolescent.**

- ◆ Then, we will discuss how to effectively talk with the adolescent about your concerns and the project, and will provide you with specific information on how to do this.

Adolescent Sessions

- ◆ Adolescents who then agree to participate in our project will firstly have an in-depth assessment of their cannabis use and experiences.
- ◆ A second session will be held about a week later, and it will involve reviewing a written Personal Feedback Report prepared specifically for each adolescent.
- ◆ We'll also provide accurate, up-to-date, and balanced educational information about cannabis.
- ◆ After the assessment and feedback sessions, adolescents may find themselves better appreciating the various positive and negative aspects of their use.
- ◆ Those who've been struggling with problems connected to cannabis may choose to make changes.
- ◆ If a young person seems to have a serious problem with their cannabis use and they are interested, they may be eligible to come for a third session, in which they will be taught strategies to help them decrease their use.
- ◆ Our approach is non-judgmental and designed to provide a safe, “no pressure” environment for adolescents to talk about their cannabis use.

General Information

There is no cost to you or the adolescent for participating in the project (it's free). If the young person you are concerned about participates in this project, however, they may be eligible to receive \$50 worth of gift vouchers from a department store.

It also is important for you to know that participation in this project is voluntary. If an adolescent decides not to participate, that's their decision.

Importantly, although the project is funded by the Australian government, all of the information that you and the adolescent provide will be held STRICTLY CONFIDENTIAL.

How does this sound?

If it's OK with you, I'll ask you a few general questions now.

Let me also remind you, that all of the information you provide today will be kept strictly confidential and will be used only for statistical purposes. The information you provide will not be linked with your name.

Do you have any questions?

Have you called about the check-up before? If yes, try to determine whether or not a QS was previously completed for this caller.

III. General Information

1) How did you find out about the Adolescent CCU? (*Tick only one*)

- (1) MDECC
- (2) Ted Noffs
- (3) Family Drug Support
- (4) ADIS
- (5) Relative
- (6) Friend
- (7) Media (specify) _____
- (8) Other agency (specify) _____
- (10) Other (specify) _____

2) **What suburb do you live in?** [to help us determine where to schedule a meeting].

3) **Do you have access to transport?**

- (0) No
- (1) Yes
- (8) Don't Know

4) If you decided to participate in the project and were eligible, would travel or transport be an issue in your participation?

_____ (0) No

_____ (1) Yes

If Yes, **Well, we are locating this project in several areas of Sydney, to make it easier for people to attend. We can schedule the Check-up sessions in an area that is easy for you to get to.**

5) What is your relationship to the adolescent you are concerned about?

- _____ (1) Parent
- _____ (2) Sibling
- _____ (3) Friend
- _____ (4) Other relative
- _____ (5) Teacher
- _____ (6) Counselor
- _____ (7) Other _____

6) How would you rate your knowledge level about cannabis use and its effects? (tick one)

- _____ (1) Not at all informed
- _____ (2) A little informed
- _____ (3) Moderately informed
- _____ (4) Very informed

Research Participation

[DO NOT ASK THESE, PROVIDE YOUR OWN IMPRESSION. IF CO IS INELIGIBLE BECAUSE OF THESE CRITERIA, CONTINUE COLLECTING DATA ANYWAY FOR STATISTICAL PURPOSES. THEN AND GO TO SECTION IV: ELIGIBILITY TO EXPLAIN WHY THEY ARE INELIGIBLE]

7) Does the caller seem fluent in English?

- _____ (0) No (explain) _____
- _____ (1) Yes
- _____ (8) Not sure, could be a problem, (explain) _____

8) Does the caller seem to have an obvious cognitive impairment?

- _____ (0) No
- _____ (1) Yes (explain) _____
- _____ (8) Not sure, could be a problem, (explain) _____

ADOLESCENT ELIGIBILITY

Because this is a research project, we are recruiting young people with specific backgrounds and experiences. I need to ask you a few questions to see if the project is appropriate for the adolescent you are concerned about.

[NB: IF CONCERNED OTHER IS ELIGIBLE, BUT ADOLESCENT IS INELIGIBLE, RECORD THE FOLLOWING INFORMATION ANYWAY FOR STATISTICAL PURPOSES, AND GO TO *SECTION IV: ELIGIBILITY*]

9) Do you think the adolescent has used cannabis in the last 30 days?

- (0) No
- (1) Yes
- (8) Don't Know

10) When were you last aware that they were using cannabis?

____/____/____ Days ago
(today = 0)

[NB: IF NOT IN THE LAST MONTH OR DON'T KNOW, MAY NEED TO PROBE FURTHER TO ENSURE GOOD CHANCE THIS CRITERION IS MET]

11) Does the adolescent drink alcohol?

- (0) No
- (1) Yes
- (8) Don't Know

11a) [IF YES] Do you know on average how many drinks they might have on a day when they drink?

_____ drinks

[IF MORE THAN 8 STANDARD DRINKS PER DAY, INELIGIBLE]

12) Do you know if they use any other drugs (excluding tobacco)?

- (0) No
- (1) Yes (specify)
- (8) Don't Know

12a) [IF YES] Do you know on average how often they used these drugs in the last 90 days?

- (0) < weekly
- (1) > weekly (specify)
- (8) Don't Know

[IF GREATER THAN WEEKLY, INELIGIBLE]

13) In the last 90 days, have they received any treatment or attended any self-help groups, such as AA or NA, related to their cannabis or other drug use?

- (0) No

_____ (1) Yes (explain) _____

Code the response according to one of the choices below

_____ (2) 12-step

_____ (3) Inpatient program

_____ (4) Outpatient or aftercare program

[IF YES, INELIGIBLE]

14) Do they have a chronic medical or psychiatric problem that might prevent their participating in this study?

_____ (0) No

_____ (1) Yes (explain) _____

[IF YES, PROBE: MAY BE INELIGIBLE IF MEANS THEY CAN'T ACTIVELY PARTICIPATE IN THE CHECK-UP]

15) Do they have any problems with reading or writing?

_____ (0) No

_____ (1) Yes (explain) _____

_____ (8) Not sure, could be a problem, (explain) _____

[ELIGIBILITY WILL BE DETERMINED ON THE EXTENT OF THE INABILITY TO READ OR WRITE: MAY BE ABLE TO READ ALL QUESTIONS, AS LONG AS COMPREHENSION IS OK]

IV. ELIGIBILITY

If the caller meets exclusion criteria (SEE CHECKLIST ON FINAL PAGE OF SCREENER) continue on to explanation below labeled "EXCLUDED". If the caller meets inclusion criteria skip to explanation below labeled "INCLUDED".

Excluded Callers

Because this is a research project, we are faced with some constraints and limitations concerning the backgrounds and experiences of people we can enroll in the study. Based on what you've told me, your situation doesn't fit with what we are looking for in the Adolescent CCU.

However, I'd like to help you find a resource that can help. [Discuss suitable referral sources with them – if necessary, call the person back with information].

If the person asks for an explanation of the reasons for ineligibility, simply state that we cannot disclose them.

[AS A LAST RESORT -- *If the person continues to ask about why they are ineligible or appears to be unhappy, simply state that we cannot disclose our eligibility criteria, because it may become public knowledge and bias people who call about the project in the future. In addition, suggest that he or she speak with the Chief Investigator.]*

Was a referral provided?

_____ (0) No
_____ (1) Yes Please Explain _____

Included Callers

From the questions you have answered, it appears you are eligible to participate in the project.

Let me explain some details of the project.

We will set up an appointment for you with a counsellor. This will be in person [ONLY OVER THE TELEPHONE IF ABSOLUTELY NECESSARY].

At that appointment you will be asked more specific questions about your concerns about the adolescent's cannabis and/or other substance use.

You will receive a detailed explanation of the Check-up and the research.

Then, we will discuss how to talk with the adolescent about your concerns and the project, and will provide you with specific information on how to do this.

We will also provide you with information on the effects of cannabis.

The appointment will take about 60 minutes of your time.

Do you have any questions about this so far?

(Again check caller's concerns and interest level before continuing).

A few more details you should know about the Adolescent CCU.

If the adolescent agrees to participate, we would like to contact you both and make an appointment to assess how things are going 3 and 6 months after you complete the Check-up.

These visits are a very important part of Adolescent CCU, because they tell us if the Check-up was useful to people and how we might change it to make it more helpful.

All of this information will be covered in further detail in a consent form which is a written document describing the project.

You'll be asked to carefully review and sign this form and will be given a copy to keep. Your confidentiality will be maintained at all times.

16) **Are you interested in participating in the Cannabis Check-Up?**

- (0) No (Go to question 17)
- (1) Yes and wants in person CO session (Go to question 17)
- (2) Yes and wants telephone CO session (Go to question 17)
- (3) Yes, but will talk to adolescent without CO session (Go to question

17)

- (4) Unsure, would like to think about it (Go to question 18)
- (8) Not Applicable/Ineligible for participation

17) [IF YES] **What are your reasons for wanting to participate?**

18) [IF UNSURE OR NO, WHY NOT] **What are your reasons for being unsure or not wanting to participate in the study?**

19) [IF UNSURE OR YES, BUT DECLINED CO SESSION] **Would it be okay if I call you in about a week to check-in to see where you're at regarding the adolescent you're concerned about and if this project can be helpful to you?**

- (0) No
- (1) Yes, (Make sure you have contact number and good time to call)

V. *Conclusion*

After getting all of the information from the caller, take a few minutes to conclude the call. One way to begin this process is as follows.

Okay, I have just asked you a lot of questions some of which were general and some of which were more personal.

What concerns or hesitations do you have about talking to the adolescent you're concerned about?

CCU QUICK SCREEN SUMMARY FORM

The left column marked "Include" should be ticked if the caller meets the inclusion criterion. The middle column "Exclude" should be checked if the caller should be excluded from the study. The right column marked "Probe" will alert the research staff to probe for more information to clarify the caller's response.

CONCERNED OTHER ELIGIBILITY

Criteria	Include (1)	Exclude (2)	Probe (3)
1) Expressing concern over adolescent cannabis use			
2) Fluent in English			
3) No evidence of medical or psychiatric difficulties that may interfere with participation			

ADOLESCENT ELIGIBILITY

Criteria	Include (1)	Exclude (2)	Probe (3)
1) Aged between 14 and 19 years			
2) Fluent in English			
3) Has used cannabis in the past 30 days			
4) Used <80gms alcohol per day on average in last 90 days			
5) < weekly use of other illicit in last 90 days			
6) Has not received substance use treatment in last 90 days			
7) No evidence of medical, psychiatric or cognitive difficulties that may interfere with participation			

Appendix D: ADOLESCENT CCU QUICK SCREEN FOR ADOLESCENTS

CALLERID: _____	DATE: _____
STAFFID: _____	CCU CONTACT: ____ (1 = in person; 2 = phone)

ADOLESCENT CCU QUICK SCREEN FOR ADOLESCENTS

Note: Before conducting a Quick Screen interview, you should have established whether the caller is an adolescent calling about him/herself or a person concerned about an adolescent's cannabis use. If a concerned other, then go to the Quick Screen for Concerned Persons. If referred by a Concerned Person who has suggested participation, get the adolescent to complete this screen prior to their baseline assessment, as a check on eligibility, and because it collects information that the baseline assessment doesn't.

I. Communicating Welcome and Establishing Rapport

It's important to take a few minutes to engage the caller. Devote enough time to this part of the call so that they will be ready to move on to the more structured parts.

Use reflections, open-ended questions, and then a summary.

Here are some possible prompts:

Introduce yourself and your job.

How did you hear about our project [will most probably have been encouraged to participate by parent/CO]

Was there something about what you heard that made you decide to call?

Has something been happening recently that has made you feel interested in talking about cannabis?

II. Informing the Caller About the Project

Can I briefly tell you about the project and see if it will meet your needs?

[If this is a good time, go on with the description. If not, set up a later time]

The Adolescent Cannabis Check-Up is a project conducted by the National Drug and Alcohol Research Centre, which is part of the University of NSW.

It's for young people who smoke cannabis and their families who might want a chance to talk about any questions they have, without worrying about feeling pressured to change.

It's private and confidential. Nothing shared with us is told to anyone else.

All aspects of the Check-up are free. That is, you will not have to pay for any of these meetings.

It's not counselling or treatment, but it's intended to help people who want to take a close look at their cannabis use.

We do this in a few steps:

First, we interview you to learn a lot about your experiences with cannabis.

Then, about a week later, we meet again and review a feedback report that has been prepared specifically for you. It gives you a chance to see how you compare with other young people, and it summarises a lot of what you think and feel about smoking cannabis. You get to take a copy of this with you.

Both of these steps are individual sessions between you and a therapist.

We believe that the Check-Up might be a helpful chance for a young person who uses cannabis to review with an unbiased person what their experiences have been like.

If a young person seems to have a serious problem with their cannabis use and they are interested, they may be eligible to come for a third session, in which they will be taught strategies to help them decrease their use.

Do you have any questions at this stage?

We will ask you to return for 2 follow-up appointments approximately 3 months and 6 months later. At that time we will ask you some questions about your cannabis use and issues related to your use since you received the Check-up. This will help us evaluate whether the Check-Up has been useful to people.

Do you have any questions about this?

If you are interested in participating, I can ask you some questions now to see if the project might be appropriate for you. We'll need about 10 minutes. Is this OK?

Is it OK? _____ (0) No _____ (1) Yes

Let me also remind you that all of the information you provide today will be kept strictly confidential and will only be used so we can work out what sort of people were interested in taking part in this study. The information you provide will not be linked with your name.

Have you called about the Check-up before? If yes, try to determine whether or not a screen was previously completed for this caller.

III. General Information

1a) How did you find out about the Adolescent CCU? (*Tick only one*)

- (1) MDECC
- (2) Ted Noffs
- (3) Family Drug Support
- (4) ADIS
- (5) Relative
- (6) Friend
- (7) Media (specify) _____
- (8) Other agency (specify) _____
- (10) Other (specify) _____

1b) Did somebody suggest you contact us?

- (1) Self
- (2) Parent
- (3) Brother/sister
- (4) Other family
- (5) Friend
- (6) Teacher/school
- (7) Employer
- (8) Health care provider (e.g., GP): specify _____
- (10) Youth service
- (11) Alcohol/drug treatment service: specify _____
- (12) Other: specify _____

2) What is your date of birth? ___/___

3) Are you

- (1) Male
- (2) Female
- (3) transgender

4) In what country were you born?

- (1) Australia
- (2) other

If other, please specify _____

5) What language do you usually speak at home?

6) Are you of Aboriginal or Torres Strait Islander origin?

- (1) No
- (2) Aboriginal
- (3) Torres Strait Islander
- (3) Aboriginal and Torres Strait Islander

7) What suburb do you live in? [to help us determine where to schedule a meeting].

8) Do you have access to transport?

- _____ (0) No
- _____ (1) Yes
- _____ (8) Don't Know

9) If you decided to participate in the project and were eligible, would travel or transport be an issue in your participation?

- _____ (0) No
- _____ (1) Yes

[IF YES] Well, we are locating this project in several areas of Sydney, to make it easier for people to attend. We can schedule the Check-up sessions in an area that is easy for you to get to.

Living Situation

10) Who do you usually live with *(read all response categories to the caller)*

- _____ (1) alone
- _____ (2) spouse/partner
- _____ (3) alone with child(ren)
- _____ (4) spouse/partner and child(ren)
- _____ (5) parent(s)
- _____ (6) other relative(s)
- _____ (7) friend(s)
- _____ (8) friend(s)/parent(s)/relative(s) and children
- _____ (9) Other _____

11) Are you planning to move within the next 3 months?

- _____ (0) No
- _____ (1) Yes, (explain) _____
- _____ (8) Don't know, (explain) _____

Legal Status

12) What is your current legal situation? (Circle whichever apply)

No legal problems	1
Awaiting a trial	2
Awaiting sentencing	3
Out on bail or released on own recognizance (ROR)	4
Probation	5
In gaol/prison	6
On treatment release, work release or school release	7
Parole	8
Detention	10
Assigned to a sentencing alternative or treatment program	11
Other involvement (Please describe)	12

Cannabis History

13) Okay, I'm going to read you a list of statements, and I want you to tell me which one best represents how you feel right now about your cannabis use.

- ____(1) I'm basically satisfied with my use of cannabis and do not plan to change it
(*Precontemplation*)
- ____(2) I'm thinking about stopping or reducing my use of cannabis, but I don't think I'll begin doing that in the next 30 days (*Contemplation*)
- ____(3) I think I will stop or reduce my use of cannabis sometime in the next 30 days
(*Preparation*)
- ____(4) Sometime within the past 6 months I stopped or reduced my level of cannabis use and I've not returned to my previous level of use (*Action*)
- ____(5) More than 6 months ago, I stopped or reduced my level of cannabis use and I've not returned to my previous level of use (*Maintenance*)

[IF CALLER IDENTIFIED STATEMENT 1, 2, OR 3, SKIP TO QUESTION 15]

**14) [IF CALLER IDENTIFIED STATEMENT 4 OR 5, ASK THE FOLLOWING]
Which of the following statements best represents how you have felt about your cannabis use in the past 30 days?**

- ____(1) I've been basically satisfied with my use of cannabis and do not plan to change it (*Precontemplation*)
- ____(2) I've thought about stopping or reducing my use of cannabis, but I don't think I'll begin doing that in the next 30 days (*Contemplation*)
- ____(3) I think I will stop or reduce my use of cannabis sometime in the next 30 days
(*Preparation*)

I'd like you to tell me about your use of cannabis during the past 30 days, that is since (anchor date).

15) During the past 30 days, how many days did you smoke cannabis? _____
Assist the caller calculate this: e.g., probe the number of times per week.

On average, how many cones/joints did you have on those days when you were using cannabis? [Make sure you specify whether cones/joints so can convert to standard cones] _____

16) When was the last time you smoked cannabis? ____/____/____ Days ago
(today = 0)

Other Drug Use

17) Have you ever consumed alcohol?

- _____ (0) No
- _____ (1) Yes
- _____ (8) Don't Know

17a) How old were you when you first had a drink of alcohol? _____
_____ years

I'd like you to tell me about your use of alcohol and other drugs during the past 90 days, that is since [90 day anchor date].

18) During the past 90 days, how many days did you drink alcohol? _____
Assist the caller calculate this: e.g., probe the number of times per week.

[IF CONSUMED ALCOHOL IN LAST 90 DAYS, ASK]

18a) On average, how many drinks did you have on those days when you were drinking? [need to know if more than 80gms on average] [Make sure you get drink type (e.g., glasses of wine, middies/schooners of beer) so can convert to standard drinks] _____

18b) How often did you consume 5 or more drinks on a day when you were drinking?

- _____ (1) daily
- _____ (2) more than weekly but less than daily
- _____ (3) more than once a month but less than once a week
- _____ (4) less than once a month

19) During the past 90 days, did you use any illicit drugs other than cannabis? [IF YES] How many days on average have you used them (probe for > once per week) How old were you when you first used [drug]? [Assist the caller calculate this: e.g., use street names, probe the number of times per week]

	<u>Frequency</u>	<u>First Use</u>
(1) heroin	_____	_____
(2) amphetamine	_____	_____
(3) cocaine	_____	_____
(4) benzodiazepines	_____	_____
(5) hallucinogens	_____	_____
(6) ecstasy	_____	_____
(7) inhalants	_____	_____
(8) other, specify	_____	_____

Treatment

20) In the last 90 days, have you received any treatment or attended any self-help groups, such as AA or NA related to your cannabis or other drug use

- _____ (0) No
- _____ (1) Yes Please Explain _____

Code the response according to one of the choices below

- _____ (2) 12-step
- _____ (3) Inpatient program
- _____ (4) Outpatient or aftercare program

Research Participation

[DO NOT ASK THE FIRST 2 QUESTIONS, GET AN IMPRESSION]

21) Does the caller seem fluent in English?

- _____ (0) No (explain) _____
- _____ (1) Yes
- _____ (8) Not sure, could be a problem, (explain) _____

22) Does the caller seem to have an obvious cognitive impairment?

- _____ (0) No
- _____ (1) Yes (explain) _____
- _____ (8) Not sure, could be a problem, (explain) _____

23) [ASK] Do you have any problems with reading or writing?

- _____ (0) No
- _____ (1) Yes (explain) _____
- _____ (8) Not sure, could be a problem, (explain) _____

Medical And Psychiatric History

24) Do you have a chronic medical or psychiatric problem that might prevent you from participating in this study?

_____ (0) No
_____ (1) Yes, (explain) _____

IV. Eligibility

If the caller meets exclusion criteria, continue on to the explanation below labelled "EXCLUDED". If the caller meets inclusion criteria skip to explanation below labelled "INCLUDED".

Excluded Callers

Because this is a research project, we are looking for young people with specific backgrounds and experiences. Based on what you've told me, your background and experiences don't fit with the purposes of this project.

But thank you for taking the time to answer the questions. If you'd like, I can help you identify some other places you could contact. [Discuss suitable referral sources with them – if necessary, call the person back with information].

If the person asks for an explanation of the reasons for ineligibility, simply state that we cannot disclose them.

NB: MAY ALSO HAVE TO SPEAK TO CO REGARDING ADOLESCENT'S INELIGIBILITY AND DISCUSS APPROPRIATE REFERRAL/RESOURCE

[AS A LAST RESORT] If the person continues to ask about why they are ineligible or appears to be unhappy, simply state that we cannot disclose our eligibility criteria, because it may become public knowledge and bias people who call about the project in the future. In addition, suggest that he or she speak with the Chief Investigator.]

Included Callers

From your answers, it appears you may be eligible to take part in the Adolescent CCU. Let me explain some details of the project.

We will set up an appointment for you with a therapist.

At that first appointment you will receive a detailed explanation of the Check-up and the research. You will be asked more specific questions about your experiences with cannabis and other substance use, and some general questions about your life and goals for the future.

The first appointment will take about 60-90 minutes of your time. You will then be scheduled for your feedback session.

Do you have any questions about this so far?

As I mentioned, if you choose to participate, you will be given feedback that is current and informative.

The feedback involves a one-on-one meeting with an interviewer for about 1 hour.

Again what you do with the information is entirely up to you, there is no pressure to change.

Again check caller's concerns and interest level before continuing.

We will contact you at 3 months and 6 months after you complete the Check-up to see how you are going. These contacts are a very important part of Adolescent CCU, because they tell us if the Check-up was useful to people and how we might change it to make it more helpful.

All of this information will be covered in further detail in a consent form. That's a written statement that summarises all of the details about our project.

You will be given a copy of this consent form to keep.

Everything you tell us will be kept confidential at all times.

We ask that you don't use alcohol or drugs before you come in for your appointments.

25) Are you interested in participating in the Adolescent Cannabis Check-Up?

- (0) No (Go to question 27)
- (1) Yes (Go to question 26)
- (8) Not Applicable/Ineligible for participation

26) If Yes, What are your reasons for wanting to participate?

26a) If Yes, would you like a family member or friend to participate? [Get details of who, or if no, why not. If no family member, allow sole participation (presuming parental consent has been waived for those under 16 years old)]

27) If No, What are your reasons for NOT wanting to participate?

V. Conclusion

After getting all of the information from the caller, take a couple of minutes to conclude the call. One way to begin this process is as follows.

Okay, I have just asked you a lot of questions some of which were general and some of which were very personal.

Do you have any concerns or hesitations about coming in for your appointment?

CCU QUICK SCREEN SUMMARY FORM

The left column marked "Include" should be ticked if the caller meets the inclusion criteria. The middle column "Exclude" should be ticked if the caller should be excluded from the study. The right column marked "Probe" will alert the research staff to probe for more information to clarify the caller's response.

Criterion	Include (1)	Exclude (2)	Probe (3)
4) Aged between 14 and 19 years			
5) Fluent in English			
6) Has used cannabis in the past 30 days			
4) Used <80gms alcohol per day on average in last 90 days			
5) < weekly use of other illicit in last 90 days			
6) Has not received substance use treatment in last 90 days			
7) No evidence of medical, psychiatric or cognitive difficulties that may interfere with participation			

Appendix E: ADOLESCENT BASELINE ASSESSMENT

CLIENTID: _____	DATE: _____
-----------------	-------------

NB: IF PARTICIPANT HAS NOT ALREADY COMPLETED THE ADOLESCENT PHONE SCREENER, CONDUCT SCREENER FIRST TO ENSURE ELIGIBILITY AND PLACE IN FILE.

PRESENTING CONCERNS

1. You have already told me that your main reason for coming today was [PARAPHRASE REASONS FOR INTEREST IN CHECK-UP PROVIDED IN ADOLESCENT SCREENER]. Is that correct? Are there any other reasons for wanting to participate?

Main reason [PARAPHRASED]

Additional reasons

a. _____

b. _____

c. _____

CANNABIS USE

2. Just to get started, I'd like to find out from you what are some of the good things you like about using cannabis?

3. And what, if anything, are the things that are less good or not so good about using cannabis for you?

4. In general, when do you use cannabis in a typical week? What's your typical pattern of using cannabis?

I will now ask you a few questions about your cannabis use patterns since you first started using cannabis. I will also be asking you some specific questions about your patterns of use over the past 3 months. The information you give me is confidential and will be used for research purposes only. It is very important that you give the most accurate answers that you can. Of course, I realise that some things will be difficult to remember, so just give me your best estimate in this case.

[CONDUCT **TIMELINE FOLLOW-BACK (TLFB)** USING TLFB INSTRUCTION SHEET AND INSERT TLFB BASELINE SUMMARY SHEET HERE.]

CLIENTID: _____	DATE: _____
THERAPIST: _____	

TLFB SUMMARY FORM – BASELINE

Week	# of days in week	# of days of Cannabis use	# of cones consumed in week
1			
2	7		
3	7		
4	7		
5	7		
6	7		
7	7		
8	7		
9	7		
10	7		
11	7		
12	7		
13	7		
14			
Total	X		
Last 30 days only			

I would like to ask you a few more questions about your cannabis use.

5. During the past three months, when you used cannabis, how many hours did you feel stoned on average (duration of effect in hours / day)? _____ hours

6. During the past 3 months, when did you typically use cannabis on weekdays (Mon – Fri)? [CIRCLE ALL THAT APPLY]

- | | |
|---|---|
| Early mornings (before school/work) | 1 |
| Mornings to mid-afternoons (during school/work) | 2 |
| Mid-to late afternoons (after school/work until 6 pm) | 3 |
| Evenings/Nights (6 pm – 4 am) | 4 |
| Didn't smoke cannabis on weekdays | 5 |

7. During the past 3 months, when did you typically use cannabis on weekends (Sat – Sun)? [CIRCLE ALL THAT APPLY]

- | | |
|---|---|
| Early mornings (4 am to 8 am) | 1 |
| Mid-mornings to mid-afternoons (8 am to 3 pm) | 2 |
| Mid- to late- afternoons (3 pm to 6 pm) | 3 |
| Evenings/Nights (6 pm to 4 am) | 4 |
| Didn't use cannabis on weekends | 5 |

In the last 3 months...

8. How have you usually used cannabis?

- | | |
|---------------------------|----|
| joint, cannabis only | 1 |
| joint, cannabis & tobacco | 2 |
| bong / waterpipe | 3 |
| pipe/chillum | 4 |
| eaten | 5 |
| other (specify) | 6 |
| don't remember/know | 99 |

9. What kind have you usually used?

- | | |
|-----------------------|----|
| heads | 1 |
| leaf | 2 |
| mixture, heads & leaf | 3 |
| hash | 4 |
| other (specify) | 5 |
| don't know | 99 |

10. What percentage of tobacco would you usually use with it? _____%

11. Where have you usually used?

at home	1
other person's home	2
work	3
public place	4
in a car	5
other (specify)	6
don't know	99

12. With whom have you usually used?

alone	1
partner	2
friends	3
relatives	4
strangers	5
children	6
other (specify)	7
don't know/remember	99

13. [IF HAS PARTNER, ASK] Does your partner use cannabis?

yes	1
no	2
not applicable	99

14. [IF YES, ASK] How do they feel about your use?

approve	1
disapprove	2
don't mind	3
they don't know	4
not sure	5

15. How old were you when you used cannabis for the first time?

_____ years

16. Have you ever used cannabis everyday, or nearly every day? For our purposes, this means that you used at least four days per week, and you did it at that rate for at least a month.

no	0
yes	1

If yes, How old were you when you first used cannabis every day, or nearly every day?

_____ years

17. You've already told me about some of the good and not so good things about using cannabis. How does cannabis affect you now?

18. Are there any sorts of situations you find yourself in, or feelings you get, that you particularly associate with wanting to use cannabis?

19. Where do you usually get your cannabis from?

- | | |
|----------------------|----|
| grow my own | 1 |
| street dealer | 2 |
| friends/acquaintance | 3 |
| brother or sister | 4 |
| parent | 5 |
| spouse/partner | 6 |
| other relative | 7 |
| steal it | 8 |
| other (specify) | 10 |

20. [IF GROW ANY OF THEIR OWN, ASK] What percentage would you grow yourself?

_____ %

21. How easy has it been to get?

- | | |
|-----------------|---|
| very easy | 1 |
| easy | 2 |
| quite difficult | 3 |
| very difficult | 4 |
| it varies | 5 |

22. On average, how much money would you have spent on cannabis per week?

\$_____ / week

Quitting/Moderating

23. Have you ever chosen to stop using cannabis for a period of time? I am referring to times that you stopped not because you were pressured (eg. if you were unable to get cannabis, or you were in hospital), but stopped using on purpose. [ASK IF THIS WAS ATTEMPTED IN THE LAST 3 MONTHS AS WELL AS “EVER”].

<u>Ever stopped</u>	yes	1	<u>Last 3 months</u>	yes	1		
	no	0				no	0

↓

[If ever **no** SKIP TO NEXT QUESTION]

[If ever **yes**, ASK] How many times have you chosen to stop using cannabis for a period of time?

_____ times chosen to stop

24. How many times have you ever chosen to significantly reduce your cannabis use for a period of time without actually completely quitting? [ASK IF THIS WAS ATTEMPTED IN THE LAST 3 MONTHS AS WELL AS “EVER”]

_____ times reduced ever

_____ times reduced in last 3 months

25. What’s the longest period of time you purposefully chose to stop using cannabis or significantly reduced your cannabis use?

_____ days

26. What was the longest period that you purposefully chose to stop using cannabis since becoming a regular user?

_____ days

We are interested in how you went about reducing your use. For instance, some people reduce the number of days on which they use cannabis, others reduce the number of times they use per day, and others reduce how “stoned” they get when they use it. Think of the time when you reduced your use for the longest period.

27. How did you go about reducing your cannabis use during this period of reduced use?

OTHER DRUG USE

[NB: EVERYTHING BUT TOBACCO IS COVERED IN THE SCREENER]

28. How many days in the last 3 months did you use tobacco (cigarettes, cigars, pipe tobacco; excluding tobacco smoked with cannabis)?

_____ days

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

_____ cigarettes / cigars / pipes

[IF PARTICIPANT REPORTED USING ILLICIT DRUGS OTHER THAN CANNABIS IN SCREENER, ASK...]

30. Did you last inject/hit up any drug

- | | | |
|-------------------------|---|----------------------|
| In the last 3 months | 1 | |
| 3 to 12 months ago | 2 | |
| More than 12 months ago | 3 | |
| Never injected | 4 | >> GO TO QUESTION 35 |

31.

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	1
6 to 10 times	2
3 to 5 times	3
Twice	4
Once	5
Never	6

32. How many times in the last 3 months did you pass on a needle and syringe to someone else after you had used it?

More than 10 times	1
6 to 10 times	2
3 to 5 times	3
Twice	4
Once	5
Never	6

33. Circle any injecting equipment that you have shared with anyone else in the last 3 months.

Spoon	1
Water	2
Filter	3
Tourniquet	4
Drug solution/mix	5
Swabs	6

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

_____ times

35. Between alcohol, cannabis, and any other drugs, which do you like to use the most?

RISK PERCEPTION

This next section asks you for your attitudes about the risks associated with cannabis use.

36. What does the term 'taking a risk' mean to you?

[ASK THE YOUNG PERSON TO COMPLETE QUESTIONS 37 TO 60 BY PLACING A CROSS IN THE BOX CORRESPONDING TO THEIR RESPONSE]

37. How much do you think people risk harming themselves physically or in other ways if they use cannabis **occasionally** (once per month)?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
-----------------	---------------------	-----------------------	--------------------

38. How much do you think people risk harming themselves physically or in other ways if they use cannabis **regularly** (once per week - once per fortnight)?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
-----------------	---------------------	-----------------------	--------------------

39. How much do you think people risk harming themselves physically or in other ways if they use cannabis **every day**?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
-----------------	---------------------	-----------------------	--------------------

40. How much do you think people risk harming themselves physically or in other ways if they use cannabis at the frequency **you** currently use it?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
-----------------	---------------------	-----------------------	--------------------

41. If you have answered slight, moderate or great risk to any of the last four questions about cannabis, what are the risks?

42. What sort of person is most at risk of experiencing the problems you mentioned?

43. How much do you think people risk harming themselves physically or in other ways if they use **tobacco / cigarettes** every day?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

44. How much do you think people risk harming themselves physically or in other ways if they use **cannabis** and drink **alcohol** together, at the same time?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

45. How much do you think people risk harming themselves physically or in other ways if they use **heroin** and drink **alcohol** together, at the same time?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

46. How much do you think people risk harming themselves physically or in other ways if they use **heroin** and use **cannabis** together, at the same time?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

47. How much risk is there of you harming yourself physically or in other ways if you use cannabis at the frequency **you** currently use it?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

48. How often have you worried about any risks that might be associated with your cannabis use?

Never 1	Rarely 2	Often 3	A lot 4
------------	-------------	------------	------------

49. How much do you think people of your age risk having **legal problems or risk getting into trouble with the police** if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

50. How much do you think people of your age risk having **financial/money problems** if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

51. How much do you think people of your age risk having **physical health problems** if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

52. How much do you think people of your age risk having **emotional / mood problems** if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

53. How much do you think people of your age risk becoming **physically addicted or physically dependent** on cannabis if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

54. How much do you think people of your age risk finding it **hard to stop using** cannabis if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

55. How much do you think people of your age risk having **a lack of motivation** if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

56. How much do you think people of your age risk having **problems with their relationships** (friends, parents, partners) if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

57. How much do you think people of your age risk **performing worse than they would otherwise at school or work** if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

58. How much do you think people of your age risk **starting to use drugs such as heroin and cocaine regularly** if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

59. How much do you think people of your age risk having **accidents when they are stoned** that they may not have had otherwise, if they use cannabis at least 2-3 times per week?

No risk 1	Slight risk 2	Moderate risk 3	Great risk 4
--------------	------------------	--------------------	-----------------

60. Please tell us what three risks might be most important to you, in making your decisions about whether or not / how frequently you use cannabis, by placing a tick next to those 3 risks below.

- Financial / money problems
- Legal / police problems
- Physical health problems
- Emotional / mood problems
- Physically addicted / physically dependent
- Finding it hard to stop using
- Lack of motivation
- Problems with relationships
- Impact on school / work performance
- Starting to use drugs such as heroin and cocaine regularly
- Accidents when stoned
- Other (specify:)

3 = In the past month

2 = >1 to 12 months ago

1 = At least 1 year ago

0 = Never

CANNABIS ABUSE / DEPENDENCE

DSM-IV (from GAIN-I)

Next, I want to go over a list of problems sometimes related to cannabis use. After I read you each of the following statements, I would like you to tell me the last time you had this problem by responding:

[GIVE YOUNG PERSON THE CARD]

3 = in the past month
2 = >1 to 12 months ago
1 = at least 1 year ago
0 = Never

61. When was the last time that: [FROM CARD]

a. you kept using cannabis even though you knew it was keeping you from meeting your responsibilities at work, school, or home?

3 2 1 0

b. you used cannabis where it made the situation unsafe or dangerous for you, such as when you were driving a car, using a machine, or where you might have been forced into sex or hurt?

3 2 1 0

c. your cannabis use caused you to have (repeated) problems with the law?

3 2 1 0

d. you kept using cannabis even after you knew it could get you into fights or other kinds of legal trouble?

3 2 1 0

SDS

Please complete the next 5 questions. They refer to **THE LAST 3 MONTHS**.

Over the last 3 months:

63a. Did you ever think your use of cannabis 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 |

63b. Did the prospect of missing a smoke 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 |

63c. Did you worry about your use of cannabis?

- | | | |
|--------------|--------------------------|---|
| 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 |

63d. Did 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 |

63e. 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 |

SDS SCORE _____ /15

64. CB

Listed below are a number of situations which people sometimes report happen to them when they stop using cannabis or substantially reduce the amount of cannabis they use.

Indicate how strongly you agree or disagree that each of the following situations or things would happen to you if you stopped using cannabis or if you substantially reduced the amount you use. Circle the number that corresponds to how strongly you believe each outcome would occur.

If I stopped or cut back on my cannabis use . . .	Strongly disagree	Some-what disagree	Don't know	Some-what agree	Strongly agree
1. I would expect to be able to think more clearly.	1	2	3	4	5
2. I would expect urges to use when I see cannabis or think about cannabis	1	2	3	4	5
3. I would expect to be healthier.	1	2	3	4	5
4. I would expect to be happier.	1	2	3	4	5
5. I would expect to be moody.	1	2	3	4	5
6. I would expect to feel lonely.	1	2	3	4	5
7. I would expect to use alcohol or other drugs more often.	1	2	3	4	5
8. I would expect to miss feeling high/stoned.	1	2	3	4	5
9. I would expect to feel more tense or anxious.	1	2	3	4	5
10. I would expect it to be more difficult to sleep well.	1	2	3	4	5
11. I would expect to be more	1	2	3	4	5

If I stopped or cut back on my cannabis use . . .	Strongly disagree	Some-what disagree	Don't know	Some-what agree	Strongly agree
productive.					
12. I would expect to feel more depressed.	1	2	3	4	5
13. I would expect to have more difficulty controlling my temper.	1	2	3	4	5
14. I would expect to be bored more often.	1	2	3	4	5
15. I would expect my memory to improve.	1	2	3	4	5
16. I would expect to do better at my job or school.	1	2	3	4	5
17. I would expect to have more energy to do things.	1	2	3	4	5
18. I would expect to have better relationships with others.	1	2	3	4	5
19. I would expect to have more money.	1	2	3	4	5
20. I would expect to feel pressured by friends to use.	1	2	3	4	5
21. I would expect to be less creative.	1	2	3	4	5
22. I would expect to worry less about getting caught.	1	2	3	4	5

65. Are there other costs or not so good things you think would happen if you were to substantially reduce or stop your cannabis use? If so, please list them below.

66. Are there other benefits or good things you think would happen if you were to substantially reduce or stop your cannabis use? If so, please list them below.

HEALTH

I am going to ask you some questions about your health. Some of these ask you about your health in the last 3 months. As before, I realise it may be difficult to remember things exactly. If you aren't sure of an answer, just give the best estimate that you can.

- 68.** During the past 3 months, would you say your health in general was. . .
(Circle one)

Excellent	1
Very good	2
Good.	3
Fair	4
Poor	5
Don't know	99

- 69.** a. During the past 3 months, on how many days were you bothered by any health or medical problems?

_____ days [IF 0, GO TO 70]

- b. During the past 3 months, on how many days have medical problems kept you from meeting your responsibilities at work, school or home?

_____ days

- c. What was/were the problem(s) you have been having?

1. _____
2. _____
3. _____

- 70.** Are you currently taking medication for allergies or health problems?

No 0

Yes 1 → [If yes, please describe below]

[IF ADOLESCENT NO LONGER AT SCHOOL, ASK]:

75a. How old were you when you left school? _____ years

75b. Why did you leave?

76. What is your current employment situation?

Full-time employed	1
Part-time/casually employed	2
Unemployed	3
Studying elsewhere	4
School only	5

77. What is your main source of income?

Full-time employment	1
Part-time/casually employment	2
Temporary benefit (e.g. sickness/unemployment)	3
Pension (e.g. disability)	4
Student allowance	5
Dependant on others	6
No income	7
Other	8

78. Who currently has legal custody of you? (Would you say...) (Circle one)

Parents living together	1
Parents that are separated and share custody	2
A single parent	3
Other family members	4
Legally emancipated minor living on your own	5
Runaway/on own (without legal emancipation)	6
State (foster home or protective service)	7
Juvenile or correctional institution	8
Other (describe)	9

79. Are you currently in a relationship?

Yes	1
No	0

80. Do you have any children?

Yes	1
No	0

ENVIRONMENT

These questions ask about your living and social environment:

- 81.** During the past 3 months, on how many days have you lived somewhere...
- Where anyone else abused alcohol there?
_____ days
 - Where you were not free to come and go as you please, such as gaol, an inpatient program, or hospital?
_____ days
- 82.** During the past 3 months, have you been under stress for any of the following reasons related to your family, friends, classmates or co-workers?

	Yes	No
a. Birth or adoption of a new family member?	1	0
b. Health problem of family member or close friend?	1	0
c. Major change in relationships (marriage/divorce/separation)?	1	0
d. Death of a family member or close friend?	1	0
e. Other changes/problems in family or primary support groups?	1	0
(Please describe) _____	1	0

The following questions concern the social aspects of your life over the last 3 months, (things like job, friends, etc.).

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	1
Sometimes	2
Often	3
Always or nearly always	4

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

Never or almost never	1
Sometimes	2
Often	3
Always or nearly always	4
Not applicable (ie., no partner)	5

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

Never or almost never	1
Sometimes	2
Often	3
Always or nearly always	4
No contact with relatives	5

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

Never or almost never	1
Sometimes	2
Often	3
Always or nearly always	4
Not applicable	5

How much of the time over the last 3 months have you lived with an illicit drug user?

Do not live with a drug user	1
Some of the time	2
A lot of the time	3
All or nearly all of the time	4

How much of the time over the last 3 months have you spent with non-drug using friends?

None of the time	1
Some of the time	2
A lot of the time	3
All or nearly all of the time	4

The next questions ask you to tell us how satisfied you are on a scale of 0 to 4, [GIVE YOUNG PERSON THE CARD] where:

0=not at all

1=slightly

2=moderately

3=considerably

4=extremely satisfied.

How satisfied are you with. .

a. where you are living? 0 1 2 3 4

b. your family relationships? 0 1 2 3 4

c. your sexual and/or marital relationships? 0 1 2 3 4

d. your school and work situations? 0 1 2 3 4

e. how you spend your free time? 0 1 2 3 4

f. the extent to which you are coping with or getting help with your problems? 0 1 2 3 4

0 = not at all satisfied

1 = slightly

2 = moderately

3 = considerably

4 = extremely satisfied

83. [ASK YOUNG PERSON TO COMPLETE FAMILY ASSESSMENT DEVICE]

LEGAL

84. During the past 3 months, on how many days were you involved in any activities you thought might get you into trouble with the police or be against the law?

_____ days [IF 0 DAYS, GO TO 92]

a. During the past 3 months, on how many days did you support yourself financially from activities that you thought might get you into trouble or be against the law?

_____ days

85. During the past 3 months, how many times have you been arrested and booked for breaking a law? (Please do not count minor traffic violations)

_____ times [IF 0 TIMES, GO TO a.]
[IF 1 OR MORE, GO TO b.]

a. Have you ever been arrested?	Yes	No	
	1	0	[GO TO 93]

b. CONTINUED NEXT PAGE

92b. What were you arrested for in the past 3 months?

(Were there any other charges?) [IF MORE THAN 5, ASK ALL AS: HOW MANY TIMES HAVE YOU BEEN ARRESTED AND BOOKED FOR EACH OF THE FOLLOWING OFFENSES DURING THE PAST 3 MONTHS?]

	Times
92b_1 Vandalism or property destruction	_____
92b_2 Forgery, fraud or passing bad cheques	_____
92b_3 Larceny or theft	_____
92b_4 Burglary or breaking and entering	_____
92b_5 Motor vehicle theft	_____
92b_6 Armed Robbery	_____
92b_7 Simple assault or battery	_____
92b_8 Aggravated assault	_____
92b_9 Forcible rape	_____
92b_10 Murder, homicide or non-negligent manslaughter	_____
92b_11 Arson	_____
92b_12 Driving under the influence	_____
92b_13 Drunkenness or other liquor law violation	_____
92b_14 Possession of drugs	_____
92b_15 Distribution or sale of drugs	_____
92b_16 Prostitution or commercialized sex	_____
92b_17 Probation or parole violations	_____
92b_18 Status or other offenses (curfew, truancy, graffiti, gang involvement /activity, run away, domestic violence, disturbing the peace, disorderly conduct, paraphernalia). (Please describe)	_____

VOCATIONAL

86. During the past 3 months...	yes	no
a. did you go to any kind of school or training?	1	0
b. did you go to school or training full time?	1	0
c. did you miss school or training for any reason?	1	0
d. did you get in trouble at school or training for any reason?	1	0
e. were you expelled from school or training for any reasons?	1	0
f. how many times did you get suspended from school or training, during the past 3 months?		_____ times

94. IMPORTANT GOALS

INTERVIEWER: Now I'm going to ask you about your plans in life for the next 3 years, basically your goals, aspirations, what you hope to do in some different areas of your life. Here are some examples of goals that someone might have: "I want to improve my marks", "I want to graduate from high school", "I want to go to university", "I want to get a job", "I want to save up some money", "I want to get my own apartment", "I want a better relationship with my family", "I want to develop more close friendships", and "I want to become more assertive". Do any of these fit for you? What are some of the things you plan to accomplish or work towards in the next 3 years?

LIST OF GOALS:

[INTERVIEWER: IF PARTICIPANT NAMES MORE THAN FIVE GOALS, ASK:

Could you select out the five goals that are most important to you right now?]

[INTERVIEWER: RECORD LIST OF TOP FIVE GOALS AND SEE NEXT PAGE FOR FURTHER INSTRUCTIONS]

List of top 5 goals:	<u>Confidence:</u>	<u>Involvement:</u>	<u>Likelihood to achieve if increase use:</u>	<u>Likelihood to achieve if reduce use:</u>
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____

[INTERVIEWER: **FOR EACH GOAL, ONE AT A TIME**, ASK ABOUT CONFIDENCE, INVOLVEMENT, AND HOW GOAL WOULD BE AFFECTED IF INCREASES CANNABIS USE AND REDUCES CANNABIS USE. THEN GO THROUGH SAME SERIES OF QUESTIONS FOR NEXT GOAL, AND SO ON. WHEN THIS IS DONE, HAVE PARTICIPANT COMPLETE “IMMEDIATE GOALS REGARDING CANNABIS“ ITEMS.]

a. Now I'd like you to tell me how confident you feel in your ability to reach each goal using this rating scale [SHOW PAPER WITH SCALE ON IT AND RECORD PARTICIPANT'S RATINGS ABOVE FOR EACH GOAL]

b. Now I'd like you to tell me what specifically you are doing to reach this goal. So, how actively involved are you in working toward this goal? Please use this scale to rate your level of involvement. [SHOW PAPER WITH SCALE ON IT AND RECORD PARTICIPANT'S RATINGS ABOVE FOR EACH GOAL]

[INTERVIEWER: ASK FOLLOWING QUESTIONS SEPARATELY FOR “INCREASED USE” AND “REDUCED USE”. INTERVIEWER WILL CHECK APPROPRIATE BOXES]

c. Now I'd like to ask you to think about these goals in relation to your cannabis use. I'd you to imagine that you decided to increase your cannabis use. Look at each goal, and think about how increasing your cannabis use would affect this goal [SHOW PAPER WITH RESPONSE OPTIONS]

d. Now I'd you to imagine that you decided to reduce your cannabis use. Look at each goal, and think about how reducing your cannabis use would impact or affect this goal [SHOW PAPER WITH RESPONSE OPTIONS]

RESPONSE CARD

Confidence in reaching this goal (How sure you are that you can achieve this goal):

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

Involvement in working toward this goal (How actively you are working toward this goal):

0	1	2	3	4	5	6	7	8	9	10
Not at all involved			Somewhat involved				Very involved			

If I **increased** my cannabis use, I would be (how likely to achieve this goal)...

0	1	2	3	4	5	6	7	8	9	10
Not at all likely			Somewhat likely				Very likely			

If I **reduced** my cannabis use, I would be (how likely to achieve this goal)...

0	1	2	3	4	5	6	7	8	9	10
Not at all likely			Somewhat likely				Very likely			

Immediate Goals Regarding Cannabis

In general, how important is it for you to continue your current level of cannabis use, on a scale from 0 to 10, where 0 = not at all important, 5 = somewhat important, and 10 = very important? (CIRCLE RESPONSE)

0	1	2	3	4	5	6	7	8	9	10
Not at all important		Somewhat important					Very important			

How interested are you in reducing or stopping your cannabis use right now, on a scale from 0 to 10, where 0 = not at all, 5 = somewhat, and 10 = very much? (CIRCLE RESPONSE)

0	1	2	3	4	5	6	7	8	9	10
Not at all		Somewhat					Very much			

In general, how important is it for you to reduce or stop using cannabis, on a scale from 0 to 10, where 0 = not at all important, 5 = somewhat important, and 10 = very important? (CIRCLE RESPONSE)

0	1	2	3	4	5	6	7	8	9	10
Not at all important		Somewhat important					Very important			

How confident are you that you'd be able to reduce or stop your cannabis use today if you tried, on a scale from 0 to 10, where 0 = not at all confident, 5 = somewhat confident, and 10 = very confident? (CIRCLE RESPONSE)

0	1	2	3	4	5	6	7	8	9	10
Not at all		Somewhat					Very much			

95. IMPORTANT REFERENTS

Now I'd like you to think about some people in your life who mean a lot to you. I'd like you to think of some people that are especially important to you, people you could turn to for help or emotional support, people you respect, or whose respect is important to you.

[FOR EACH PERSON NAMED ASK AND RECORD: 1) NAME OF PERSON AND RELATIONSHIP TO YOUNG PERSON, 2) WHETHER OR NOT THIS PERSON KNOWS ABOUT YOUNG PERSON'S CANNABIS USE, AND 3) HOW THIS PERSON FEELS, OR WOULD FEEL (IF THEY KNEW) ABOUT THE YOUNG PERSON'S CANNABIS USE.

PROBE FOR ADDITIONAL NAMES, PAYING ATTENTION TO MISSING CATEGORIES OF PEOPLE, I.E. IF THEY HAVE NAMED ALL PEERS OR NO FAMILY MEMBERS]

Important people in your life	Does this person know you use cannabis?	How does (or would) this person feel about your cannabis use?