Integrated Treatment Systems

A Proposed Treatment System.

Phil Harris

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The Author

Phil Harris has worked as a practitioner, manager, supervisor and trainer in substance misuse for 20 years. He is involved in the strategic development of integrated treatment services for drug and alcohol users across 12 counties in the UK. This has included designing specialist bespoke treatment programmes for specific treatment populations including young people, concerned others, prolific offenders and street drinkers. He has worked as an advisor for the World Health Organisation in the Balkans and is an advisor the US BICEP programme. A consultant lecturer at Bristol University's Social Policy Unit, he has published over twenty scholarly articles on all aspects of substance abuse and effective treatment. He has published several books on addiction and effective treatment including Drug Induced (2005), Empathy for the Devil (2007) and The Concerned Other (2010).

Executive Summary

Social policy requirements are placing high demands on agencies to prescribe and case manage increased numbers of problematic drug and alcohol users. In order to preserve outcomes it is imperative that agencies identify increasing efficiencies within closely targeted treatment.

Substance misuse occurs on two principal axis. Physical dependence is indicated by the presence of tolerance / withdrawal. Social complications are the breakdown in social functioning that arises as a consequence of use. Effective treatment requires the medical provision of prescribing to manage tolerance and withdrawal as well as psycho-social intervention to repair ruptures in social functioning.

Both alcohol and drug problems occur on a spectrum of severity though are initiated at different times in the life course. Drug use tends to be associated with a younger onset in adolescence where as alcohol problems tend to have a later onset in middle age. This means alcohol users tend to have a broader range of social functioning prior to the onset of their problems.

Research on the recovery process reflects the classification of substance misuse problems. Successful change is demonstrated in the abolition of withdrawal, the reconstruction of broken social attachments as well as a shift in values in the individual.

Motivation for change may vary greatly. Purely internally driven motivation for change is the least enduring form of motivation. External pressures and negative consequences are intrinsic to the change process. Harm reduction approaches such as substitute prescribing can be vital in the protection of harm from consumption but may also forestall motivational forces for lifestyle change.

Variance in severity of problems allows for greater titration of psychosocial treatment interventions. Severity of substance use problems can be calibrated by the use of AUDIT and DUDIT, where clients may be referred to appropriate but less intrusive forms of treatment.

Assessment should map the exact ruptures in social functioning that sustain use and allow for the creation of domain specific care plans that target improvements in every area of the clients life that is assessed. Treatment interventions can be harmonised to ensure they are relevant to the explicit goals of the clients care plan. The CRA model offers the architecture for treatment planning that can house a diverse range of psychosocial interventions.

Treatment for alcohol problems should be delivered within a *stepped care* framework. This offers rapid access to effective and briefer interventions for less severe problems.

Treatment for opiate users on substitute prescriptions should utilise a *motivated stepped care* model of high or low treatment intensity. This allows scarce psychosocial interventions to be targeted at those most receptive to it in high intensity. Those in the low intensity treatment arm will have a harm reduction care plan and no immediate access to psychosocial support within their agreed contract. This will be available to them through tier 2 services or by requesting a transfer to high intensity.

Previously lost treatment time on pursuing unengaged clients can be reallocated to the development of a broader range of treatment modalities of increasing intensity. It should also allow for the development of treatment interventions that are able to assist clients achieve the stated goals in the care plans.

Counselling resources may accommodate a wider range of stated interventions that will assist clients with specific goals. This may include controlled alcohol use as well as behavioural marital therapy amongst others. More generalised counselling models can be deployed with goals outlined in the care plan.

Treatment responsiveness and common alliance factors are central in treatment delivery. Treatment interventions can be enhanced significantly by paying specific attention to these factors regardless of modality delivered. The use of Outcome Rating Scales and Session Rating Scales is advised for all episodes or psychosocial intervention in order to ensure treatment responsiveness and strong alliance factors are maintained.

Aftercare to support treatment gains can be enhanced by retaining clients in treatment for a longer period rather than an intensive period. CPR procedures can significantly enhance long term gains.

Introduction

The National Treatment Agency policy mandate to increase the number of problem drug and alcohol users in treatment services places unique pressures on service providers. Within the sphere of opiate use in particular, significant increases in prescribing places have generated a disparity in treatment ratios between prescribing and psychosocial care. The prescribing of substitute medications demands lower intensity monitoring once titration is completed. This offers the opportunity to hold large case loads of clients in prescribing services. However, the fact that all clients on substitute prescribing must also be care planned with adjunct psycho-social support creates pressures within treatment systems. Psycho-social intervention with a high need client group demands a higher intensity of treatment time to be invested in each person. This places a large case load on each practitioner who has to then meet the unique and complex psycho-social needs of each client who is prescribed. The lack of motivation in opiate using clients to engage in or respond to psycho-social interventions can exacerbate this problem. Limited treatment resources can be deflected in the identification and management of clients with low motivation alongside treatment time lost to clients who persistently do not attend appointments. This will also affect other substance-using treatment populations where insufficient treatment time may be unavailable or curtailed due to these pressures. In light of these challenges, the ability to identify efficiencies within treatment systems has become a priority in order to deliver high quality care along with maintaining treatment integrity. This is even more salient in an age of performance and outcome management. The central problem that substance misuse services face is how to effectively treat a burgeoning client cohort on increasingly limited resources whilst demonstrating their effectiveness.

Treatment efficiencies are not always easy to identify in substance misuse services. Historically agencies and practitioners have tended to assume that addictions are a uniform disorder and that outcomes are directly related to time in treatment and practitioner skill. This has led to the adoption of time-intensive treatment approaches. However, this is not necessarily the case. ‘More’ treatment is not necessarily more effective in terms of outcome. Rather ‘better’ treatment is more effective. ‘Better’ is a complex area. It is not simply about the treatment provider’s competency or the intensity of approach deployed. Rather it is about understanding the specific nature of substance misuse problems and organising treatment interventions that can address its core features. Based on this understanding it is possible to develop exact treatment prognosis and develop targeted treatment interventions that are effective within shorter treatment episodes. This allows for titrating psycho-social interventions to the specific needs of the client. These titrated treatment interventions can then be rationalised within a treatment system. This demands clear and uniform screening processes that can identify appropriate levels of treatment intensity based on clinically established diagnostic criteria. This allows a clear bench marking for the assessment of presenting issues.

Substance misuse clients present with a wide range of needs and motivation to address them. A more efficient treatment system also needs to be able to account for this spectrum of need and readiness to engage. Historically, treatment has limited itself to a narrow set of concerns which were either the physiological or

psychological aspects of recovery. Reviewing clinical research we shall see that recovery is greater than the overcoming of physical dependency and emotional disturbance. Recovery processes are underpinned by the restitution of a wide range of social functioning. A treatment system that cannot account for this broader treatment outcome is liable to operate at a sub-optimal level. Treatment efforts may be misdirected or clients remain in treatment longer than necessary. This may be unsatisfactory for clients entering in treatment who desire the least intrusive forms of intervention. This is important as treatment outcomes are highly dependent upon the client's willingness to participate in their treatment and levels of satisfaction with it are also vital to treatment outcome.

Based upon the latest research and treatment evidence, this paper will set out how treatment interventions can be maximised with a diverse client group. It will clarify key definitions of substance misuse problems and describe how treatment can most effectively address them. It will create capacity for a wider base of treatment interventions that are targeted at a range of increasing complex needs. This will ensure that all interventions are integrated and maximise treatment efficiencies whilst preserving a higher level of treatment outcome and client satisfaction with services provided. The proposed new model will:

- Increase treatment outcomes
- Increase treatment satisfaction
- Broaden the base of treatment options
- Maximise the psycho-social resources
- Increase throughput
- Increase motivation in responsive and non-responsive clients

Substance Misuse Problems

Establishing a clear definition of substance misuse problems has been difficult historically. The field has been prone to adopt highly speculative diagnostic definitions from psychotherapy models which lack clinical utility or wide medical acceptance. In the mid 1970s the World Health Organisation approached two leading clinical researchers to identify the medical components of alcoholism. Edwards and Gross (1976) recognised that alcohol problems occurred on a spectrum of severity from harmful use to dependence. They also observed seven clinical features that were common when a problem drinker presented for treatment that required medical intervention. Subsequent research supported their findings that there was an Alcohol Dependence Syndrome. A syndrome is a disorder characterised by defining symptoms but where all symptoms need to be present (See table 1).

Criteria	Descriptor
Narrowing of Repertoire	The problem individual begins to drink the same regardless of social context. With advanced drinking, consumption follows a strict daily timetable.
Salience of Drinking	Priority is given to maintaining alcohol intake over time, relationships and finances.
Increased Tolerance	The drinker can tolerate and still operate under the influence of large doses of alcohol that would incapacitate an ordinary drinker. Will also develop cross-tolerance to other depressant

	drugs.
Withdrawal Symptoms	The client will experience severe and multiple symptoms, usually on waking that include tremor, nausea sweating and mood disturbance.
Relief or Avoidance of Withdrawal Symptoms by Further Drinking	Drinking occurs earlier in the day as dependence progresses to alleviate the onset of withdrawal. Usually the periods of abstinence are limited to 3-4 hours. Drinking is triggered by mild withdrawal in anticipation of worsening symptoms. Often early drinking becomes ritualised with the client knowing the exact amount to consume to avoid rather than alleviate withdrawal.
Subjective awareness of compulsion to drink	May be ruminating on alcohol during a period of withdrawal as well as loss of control over drinking once initiated.
Reinstatement after abstinence.	A rapid return to pre-treatment drinking levels after relapse.

Table 1: Alcohol Dependence Syndrome (Edwards and Gross 1976)

Based on the Alcohol Dependence Syndrome, there are currently two different diagnostic criteria for assessing dependence. These are the American Diagnostic & Statistical Manual of Mental Disorders (DSM IVR) and the World Health Organisations International Classification of Diseases (ICD-10). The ICD-10 diagnostic criterion is usually reserved for research purposes. Whilst these two diagnostic systems share a great deal of commonality they also share some important differences. They apply to all psychoactive drugs with the exception of caffeine. They also both recognise that dependence occurs on a spectrum of severity. The individual must experience at least three symptoms within a 12 month period for a diagnosis to be made in both systems. Criteria are divided between physiological (tolerance and withdrawal) and non-physiological (emotional and behavioural). (See table 2.) Research demonstrates strong agreement between the two diagnostic criteria in a wide range of cultural groups and across genders (Hasin et al 1997).

DSM-IV Criteria for Substance Dependence	ICD-10 Criteria for Dependence
A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifest by 3 (or more) of the following, occurring at any time in the same 12 month period.	Three or more of the following manifestations should have occurred together for at least 1 month or, if persisting for a period of less than 1 month, should have occurred together repeatedly within a 12 month period.
1.Increased tolerance as defined by: a) A need for markedly increased amounts of the substance to achieve intoxication or desired effect. b) Markedly diminished effect with continued use of the same amount of the substance.	1. Strong desire or sense of compulsion to take the substance.
2. Withdrawal as manifested by either of the following: a) The characteristic withdrawal syndrome for the substance. b) The same (or closely related) substance is taken to relieve or avoid withdrawal symptoms	2. Impaired capacity to control substance-taking behaviour in terms of its onset, termination, or levels of use, as evidence by: the substance being often take in larger amounts or over a longer period of time than intended: or by a persistent desire or unsuccessful efforts to reduce or control substance use.
3. The substance is often taken in larger amount or over a longer period than was intended.	3. A physiological withdrawal state...when a substance is reduced or ceased, as evidenced by the characteristic withdrawal syndrome for the substance, or by use of the same (or closely related) substance with the intention of relieving or avoiding withdrawal

	symptoms.
4. There is a persistent desire or unsuccessful efforts to cut down or control the substance use.	4. Evidence of tolerance to the effects of the substance, such that there is a need for significantly increased amounts of the substance to achieve intoxication or the desired effect with continued use of the same amount of the substance.
5. A great deal of time is spent in activities necessary to obtain the substance (e.g. visiting multiple doctors or driving long distances), use the substance (e.g. chain smoking), or recover from its effects.	5. Preoccupation with substance use, as manifested by important alternative pleasures or interest being given up or reduced because of substance use; or a great deal of time being spent in activities necessary to obtain, take, or recover from the effects of the substance.
6. Important social, occupational or recreational activities are given up or reduced because of the substance.	6. Persistent use despite clear evidence of harmful consequences...as evidenced by continued use when the individual is actually aware, or may be expected to be aware, of the nature and the extent of harm
7. The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g. current cocaine use despite recognition of cocaine induced depression, or continued drinking despite recognition than an ulcer was made worse by alcohol consumption.	

Table 2: Comparison of DSM-IVR & ICD 10 Diagnostic Criteria

Whilst both systems do agree with each they are not without controversy. The main controversies associated with these diagnostic criteria are twofold. Firstly, this criteria has been developed for adults and so do not appear to be as accurate in assessing young people's use (Sarr et al 2000). Secondly is the priority role that should be given to the physiological criteria within the diagnostic criteria. Edwards and Gross (1976) earlier definitions required at least one physiological symptom to present for a diagnosis to be made (tolerance and withdrawal) as opposed to the behavioural elements. This distinction appears to be well founded. Filmore's (1987) studies of a large population of heavy drinkers found that individuals who reported problem drinking without experiencing physiological symptoms of dependence (tolerance & withdrawal) were highly unlikely to be experiencing problems at follow up. Research amongst problematic users identified that the presence of tolerance and withdrawal to be relatively rare (Cottler et al 1995). In general it continues to be found in higher levels in alcohol users than other substances.

Research into physical withdrawal has been equally problematic. The original conception of dependence presented by Edwards and Gross (1976) suggested that tolerance would increase prior to the onset of withdrawal Research by Langenbucher et al (1997, 2000) found that withdrawal symptoms were a strong indicator of a wide range of substance related problems and relapse. Hasin et al (2000) found that amongst a sample of clients who met the criteria for DSM IVR for dependence, those that had experienced withdrawal were 3 times more likely to remain meeting this criteria a year later compared with those that did not. At the same time, many problem alcohol drinkers who do meet the criteria for physiological withdrawal do not always show other symptoms. The American DSM – IVR does permit a diagnosis to be made without the presence of tolerance and withdrawal, but this means that the diagnosis captures heavy drinkers as well as those with alcohol dependence and does not discriminate well between the two (Schuckit et al 1998;

Hasin 2000). As Edwards et al (2003) state '…but for clinical purposes it is probably best to restrict the diagnosis of alcohol dependence to patients who have experienced withdrawal symptoms to at least some degree.' This suggests that physiological symptoms of withdrawal that require medical intervention is restricted to certain key substances. We tend to see the pattern of tolerance and withdrawal in depressant drugs, such as alcohol, tranquilisers and heroin. Other substances may include elements of a 'crash' but not a full blown physical withdrawal that requires medical intervention.

The current diagnostic criteria do not make clear separation of the types of substance misuse problems (dependence verses social consequences). Therefore, there is greater clinical utility in the original Edwards and Gross (1976) model. Implicit in this diagnostic criteria is that substance misuse problems occur on two specific axis. Physiological dependence (tolerance and withdrawal) requires medical intervention and the psycho-social complexities (narrowing of repertoire, salience, subjective compulsion and reinstatement) that can emerge as a result of use problematic usage. It is also important to recognise that these problems exist on a scale of severity. The social complication of use can range from minor problems to the global erosion of all social relationships leading to complete social exclusion (See table 3). This is understood as addiction. Historically, treatment has often overtly focussed on the emotional aspects of social complications at the expense of wide ruptures in social functioning.

Social Domain	Example of Problems
Emotional \ Mental Health	Depression, anxiety, poor self control, low self-efficacy belief, learned helplessness
Housing	Homelessness, debt, supported accommodation, rent arrears, anti-social behaviour, poor hygiene and management, debts from bills.
Family	Family breakdown, domestic violence, abuse, neglect, social services involvements, estrangement, conflict.
Employment \ training	Poor performance, disciplinary, loss of job, debt, exclusion from college.
Offending	Acquisitive crime, domestic violence, violence, victimisation, drug related possession and supply offences, probation and prison, drink driving.
Health	Health related problems that emerge from use, modes of and impoverished lifestyle e.g. malnutrition.
Partnering	Conflict, relationship breakdown.
Social Recreational Life	Over involvement in use, isolation from wider peer group and alternative sources of satisfaction, boredom.
Values	Loss of values, guilt, shame.

Table 3: Examples of Social Complications

The imperative for separation in dependence and social complications is important. Substitute prescribing and detoxification address the client's tolerance and withdrawal whilst psycho-social interventions address social break down. This means that the gains from prescribing alone can reduce harm directly associated with use but do not necessarily alleviate the social consequences of use that afflicts the user's life. This is illustrated by the research of McClellen et al (1993), who assigned a cohort of problem opiate users to three different treatment modalities. This included a methadone only group, methadone and standard CRA group, and a methadone and enhanced CRA group. Reviewing the outcomes of these interventions revealed far higher levels of adjunct use on top of the methadone prescription in the methadone only group (See figure 1). Two thirds of this cohort

had to be removed from the treatment study due to increase in overdose and health risks. Furthermore, those in the methadone and enhanced CRA group showed the highest range of positive lifestyle gains.

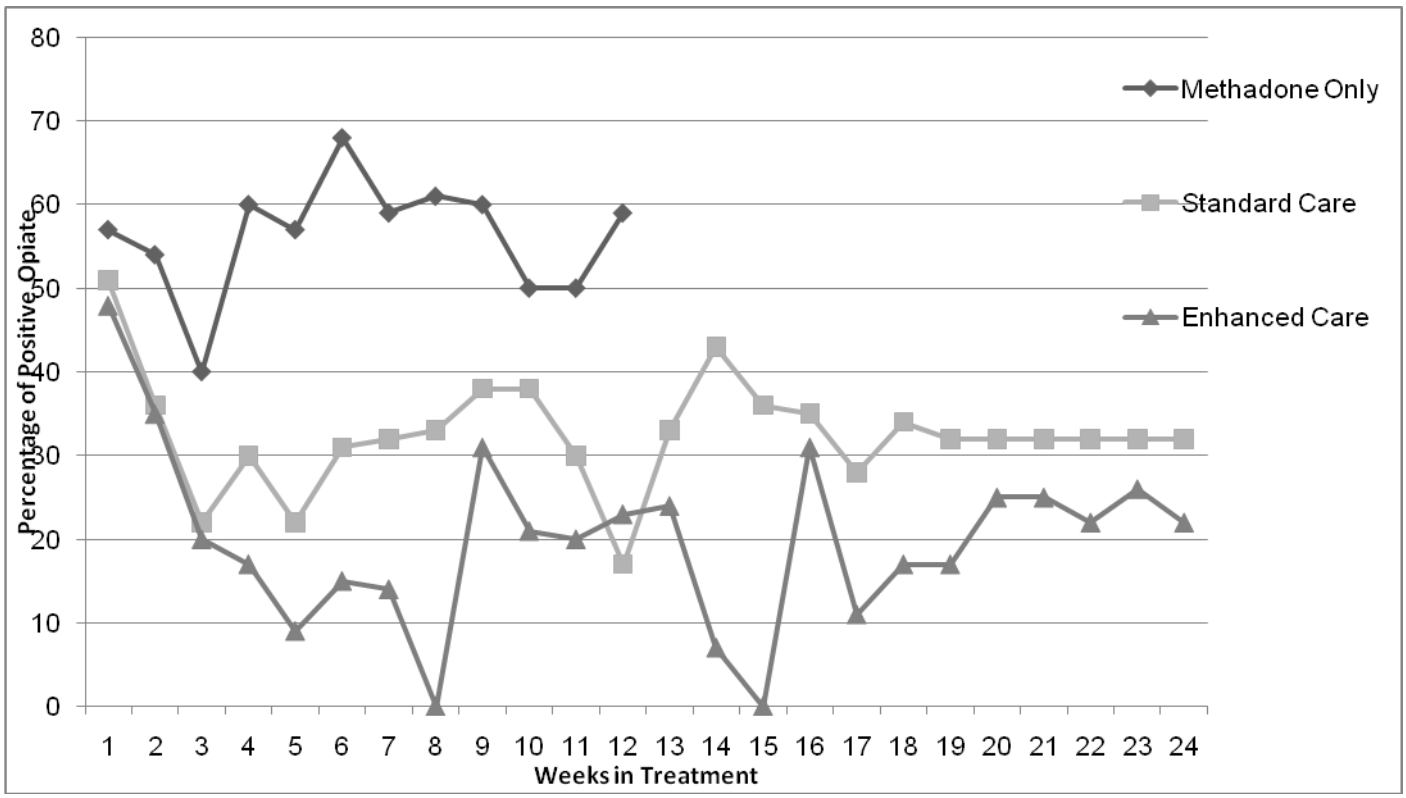

Figure 1: Percentage Positive Opiate Results by Treatment Modality McClellen et al (1993)

It is essential that psycho-social treatment interventions are targeted at the wider range of social problems in order to generate positive lifestyle change. Where treatment interventions confuse the issues of dependency with the problems of social complication, its outcomes are significantly compromised. Dependence requires a medical response though substitute prescribing and detoxification which are substance specific. Conversely, social complication requires psycho-social interventions that address the specific ruptures in functioning. Problems in social functioning are not substance specific. This is why different psycho-social treatment interventions are as equally effective for a range of substance abuse problems. Furthermore, the intensive nature of treatment may not be a crucial factor in outcome but rather the extensive nature of treatment. As social complications can occur across a wide range of social domains such education \ training, work, housing, family, offending and self-care it is essential that these wider domains are addressed specifically. This explains why generic counselling models, which tend to be limited in their range, are not effective for substance abuse problems. Research demonstrates that treatment outcomes do not generalise across life domains in socially excluded cases (use Pattison 1976; Barbor et al 2003; Emrick and Hanson 1983). This is because addressing the emotional life of the client may lift depression but this benefit does not automatically improve other areas of functioning such as housing or career prospects. As a result generic counselling models tend to operate

more effectively with less severe substance related problems or singular life issues rather than multiple problems across several social domains.

The level of social complication that occurs is dependent on several factors. The higher the consumption and the cultural \ legal status of the drug will influence the impact the substance has on social complications. For example, high consumers of alcohol report using the substance for protracted periods before they experience social exclusion whereas heroin users report rapid social exclusion from use (Klingemann 1991). The more severe the physical dependence the more likely it becomes that social functioning will be comprised due to the pressure the individual feels to use as a priority. However, many individuals do sustain their social functioning despite the experience of physical dependence. Another important factor is the level of functioning prior to the onset of the problem. Drug use tends to occur from adolescence into the twenties. Problem drug users therefore are unlikely to have established and stabilised an adult lifestyle prior to rapid social exclusion. This social exclusion deprives the problem drug user of the developmental skills necessary for managing the demands of adult life. Problem drinking tends to occur later in the life course and represents a break down in the adult life people have constructed. As a result, alcohol users can have wider variance in social functioning. This can range from singular problems in social functioning such as difficulties at work or in their relationships to the catastrophic damage experienced by street drinkers. In comparison, the earlier onset problem heroin and primary crack users are liable to experience global erosion in the social functioning. This has important treatment implications for psycho-social treatment. Whereas primary drug users may need more extensive treatment interventions to address every social domain, problem alcohol users higher levels of social functioning may require far less intensive approaches.

Recovery

The research on the recovery process demonstrates a high concordance with the diagnosis of substance misuse problems. Research across a wide range of change populations demonstrates clear patterns in the recovery process. Prochaska and DeClemente's (1992) Stages of Change model has limited utility when applied to addictions. Their sample studies have focussed primarily on nicotine users who do not suffer the same social consequences as problem alcohol or drug users. Within this caveat, their definition of the 'maintenance' stage shows that successful self-changers find alternative strategies for coping with pressures (counter conditioning), separate from using groups (environmental control), reward gains heavily (symptom substitutions) and build new 'helping relationships.' These 'helping relationships' are not therapeutic in a formal sense but describe entry into new pro-social relationships. Similarly, DeLeon's (1996) study of treatment-seeking opiate users found that those in successful recovery re-constructed their identity along with the re-engineering of new non-using pro-social relationships.

Klingemann's (1992) natural remission studies demonstrated several components to successful recovery. The first was the development of tips and tricks to protect the achievement of being drug or alcohol free. This was accompanied by a shift in values and the re-construction of social relationships. Stall and Biernaki (1986) reviewed all available literature on natural remission from alcohol, drugs, nicotine

and obesity. They found the exact same findings. Successful changes developed a new value base and demonstrated a successful re-integrated into a new identity and the development pro-social groups. The research on recovery is very clear: the recovery process is characterised by the abolition or control of dependence alongside the reconstruction of relationships (see table 4). The central difference between the treatment seeking populations and the natural remitters in these studies was social functioning prior to the onset of the problem. Natural remitters had sustained relationships with pro-social groups and had better pre-morbid social functioning that assisted them in recovery. This underlies the finding that has been found in a wide range of studies that actual consumption rate has little bearing on treatment outcome.

De Leon (1996) Treated Remission	Klingemann (1992) Natural Remission	Stall & Biernaki (1986) Natural Remission
Integration and Identity Change: The resulting treatment experiences culminate in self-perceived change in personal and social identity.	**Maintenance Stage** *Tricks and renewed confidence* *Protecting the achievement* A New Life: *Becoming a helper* *Post-materialism* *Peace of Mind & Reconciliation*	**Stage 3** Ability to successfully renegotiate identity Successful in Eliciting Significant Other Support Ability to Manage Cravings Initial Integration into Nonusing Social Groups Lessening of Craving (2 years) Resolution \ Stabilisation of a new identity

Table 4: Comparison of Recovery Research

Motivation

Whilst research on the nature of recovery is unequivocal, the question of what motivates individuals to work towards it is divided. A number of rival theories exist which present a variety of increasing sophisticated models (See Arjen 1991; Orford2001; West 2005). It is important to recognise certain assumptions in the field which have hampered the development of motivation in clients. Firstly is the predominance of the Stages of Change model developed by Prochaska and DiClemente (1992). An important concept of the Stage of Change has been lost in translation from research to practice. The authors of this approach have always stated that the Stages of Change is a 'model' of the change process. It is not an explanation of 'how' change occurs. This methodological distinction is important. The treatment field tends to adopt highly individualistic \ psychologically orientated approaches to addictions. As a result, the adoption of the Stages of Change has supported the widely held presumption that change is purely a psychological artefact that occurs in invariant stages in the mind of the problem user. This purely psychological view simply assumes change unravels without reference to environmental forces. As a result, many practitioners are of the view that authentic change is purely driven by the internal motivation of the client alone. And indeed, may conclude that this is the only way change can occur in the individual.

This misconception, whilst widely accepted, is rooted in treatment ideology and not clinical reality. Reviewing presentation for treatment, Hatjen et al (1976) found less than 5 per cent of clients presented for change purely for internal reasons.

Furthermore, the small cohort who did, subsequently performed poorly once in treatment. Marlowe et al (2001) found that the pre-dominant reason for treatment entry was psychological dissatisfaction *and* external pressure. These external pressures included family ultimatums, debt, work problems and legal sanctions. Interestingly, the external pressure to change does not correlate with the substance used or how much is consumed. In other words external pressure and dependence are not related. People are pressured into treatment because of social complications that arise from their use rather than consumption itself. As such, pressure to change is an inevitable consequence of addiction. External pressure to change becomes an inherent component in the motivational process.

The available literature on motivation for treatment can be simplified to a cost benefit analysis of beneficial consequences of use versus the detrimental consequences of use. When the detrimental consequences of use begin to outweigh the perceived benefits, individuals begin to initiate change. Furthermore, as external pressures to change, such as family ultimatums, disciplinary hearings at work or court orders, remain constant they sustain consistent pressure on the individual for change. In comparison purely internal motivation can fluctuate dramatically usurping change efforts. Therefore, external consequences have a significant impact on promoting and sustaining motivation. A central dilemma for treatment providers is the conflict between the external stressors that clients face and harm reduction. As we have seen, many client's present for treatment due to external pressures. At the same time, harm reduction is primarily effective in reducing pressures. This means that highly motivated clients presenting for treatment may soon experience an evaporation of motivation as external stresses are diminished. Hence a large number of opiate users remain prescribed methadone for extended periods of time with no motivation to make positive lifestyle change.

Within this it is also important to recognise that there is a wide degree of variance in outcomes for those that remain on prescriptions. Whilst substitute prescribing is effective in reducing stresses and health problems relating to consumption, the spread of these outcomes is not uniform across all treatment seekers. For example, the NTORS (Gossop et al 2000) research identified that 25 per cent of clients on methadone prescriptions did not experience any benefit on any measure. Similar findings have been identified in US methadone clients (Belding et al 1998). This places a paradox at the heart of UK treatment. Harm reduction offers a pragmatic strategy to reduce the consequences of problematic use. At the same time, it may sustain these unhealthy lifestyles through forestalling motivation to change by diminishing the very consequences that promote positive lifestyle change.

Screening and Assessment

This deeper understanding of substance misuse problems and their cessation offers scope for the development of more efficient and targeted approaches. This can be achieved in several ways. Firstly, more effective calibration of substance related problems may offer a clearer prognosis for the length and extent of psycho-social treatment necessary to address it. This should identify clients with less severe dependence or higher social functioning for briefer interventions which show very good outcomes for this cohort. By moving this client cohort out of treatment quickly, it allows for greater resources to be invested in those with more complex problems.

Secondly, the recovery process itself offers a clear benchmark for treatment interventions. Treatment that is directed towards the restitution of social functioning across all life domains impaired through consumption offers greater focus and direction into the nature of treatment and its long term aim. Finally, motivational issues regarding the want for change offers insight into targeting clients who are most ready to receive treatment. In addition to this, treatment structures need to be organised to maximise motivation for positive lifestyle change. These issues will be examined separately in order to construct an integrated treatment service that is able to accommodate these essential components

A number of tools have been developed that have shown robust reliability in the calibration of drug and alcohol problems. In 1982 the World Health Organisation asked an expert committee to identify a brief screening tool for the Alcohol Dependence Syndrome. The principle method was to identify questions that best separate low and heavy drinkers based on the ICD-10 alcohol syndrome. The result was a 10 item questionnaire, The Alcohol Use Disorder Identification Test (AUDIT), which was developed specifically as a screening tool to allow practitioners to identify undiagnosed people who would benefit from reducing or ceasing alcohol consumption. The AUDIT assessment asks ten questions, each having four possible answers (See appendix one for an example of AUDIT). The client is scored 1-4 dependent upon the response offering a total raw score of 0-40. At the lowest end 0 represents no alcohol related harm, moving up to 8-15 indicating alcohol consumption might be hazardous. At 16-19 actual harm is likely to be occurring. Whilst 20 and over indicates significant harm and dependence on alcohol is occurring. However, as there is possible cross over between physical dependence and social complications, the AUDIT is constructed of three sub-scales. The first three questions refer to alcohol consumption, questions four to seven related to alcohol dependence and the final three questions refer to hazardous use. (See table 5). Calibration of severity is therefore based on the over raw score and the indications of the sub-scales.

Domains	Question	Item Content
Hazardous Alcohol Use	1	Frequency of drinking
	2	Typical Quantity
	3	Frequency of heavy drinking
Dependence	4	Impaired control over drinking
	5	Increased salience of drinking
	6	Morning Drinking
Harmful use	7	Guilt after drinking
	8	Blackouts
	9	Alcohol Related Injuries
	10	Others concerned about drinking

Table 5: AUDIT Sub-Scales

Developed over two decades, the AUDIT has proven a reliable measurement of dependence and problem drinking across gender (Saunders, et al 1993a), age (Saunders et al 1993b) and culture (Allen et al 1997). The AUDIT tool can be used in a wide variety of primary care and professional settings making it ideal for tier one services. This allows it to align with current Government recommendations to 'target' risk groups rather than 'universally screen' all individuals as stated in the Alcohol Harm Reduction Strategy for England. In terms of drug abuse, the AUDIT's sister

tool, Drug Use Disorder Identification Test (DUDIT) has been developed and shown similar high levels of validity for drug related problems (Berman et al 2002). Both tools offer considerable insight into treatment prognosis and recommended levels of treatment (See table 6). The DUDIT is a less sensitive tool, reflecting the more rapid exclusion of the drug user than the variance seen in the problem drinker.

Risk Level	Intervention	AUDIT Score *
Zone I	Alcohol Education	0-7
Zone II (Hazardous Drinking)	Simple Structured Advice Session	8-15
Zone III Harmful Drinking \ Slight Dependence)	Simple advice plus extended (1-3 sessions) brief intervention and monitoring	16-19
Zone IV (Slight Dependence \ Dependence)	Referral to specialist for diagnostic evaluation and treatment and comprehensive treatment	20-40
*The AUDIT cut off score may vary slightly depending on the country's drinking patterns, the alcohol content of standard drinks, and the nature of the screening programme. Clinical judgement should be exercised where the patients score is not consistent with other evidence, or if the patient has prior experience of alcohol dependence. It may also be instructive to view the patients responses to individual questions dealing with dependence symptoms (Question 4, 5, 6) and alcohol related problems (Questions 9, 10). Provide the next highest level of intervention to patients who score 2 or more on questions 4, 5, 6, or 4 on question 10.		

Table 6: Treatment Prognosis Based on AUDIT Scores

The use of AUDIT and DUDIT can offer considerable opportunity to screen those clients who are more appropriate for brief interventions in order to move them out of treatment settings quickly with a beneficial treatment episode. This is more likely in the case of problem drinkers who demonstrate a wider range of social functioning. For example, hazardous users without complex needs should be offered a brief intervention of simple advice in tier one services. Harmful users should receive a brief intervention such as motivational enhancement of 1-3 sessions at tier two. But as the severity of the individuals problems increase, then the level of treatment should increase accordingly. Treatment should span simple advice at one end of the treatment pole to care co-ordination at the other. This could also include a goal hierarchy from controlled use to abstinence accordingly. This is referred to as *stepped care*. The stepped care model suggests that new entrants for treatment should be assessed, and initially receive the least intensive or least prolonged intervention considered suitable for the level of need and complexity identified. If response to such an initial intervention is poor, a more intensive or prolonged package of care may be needed (See figure 2). This allows for the deployment of brief interventions based on clinical findings and not resource limitations.

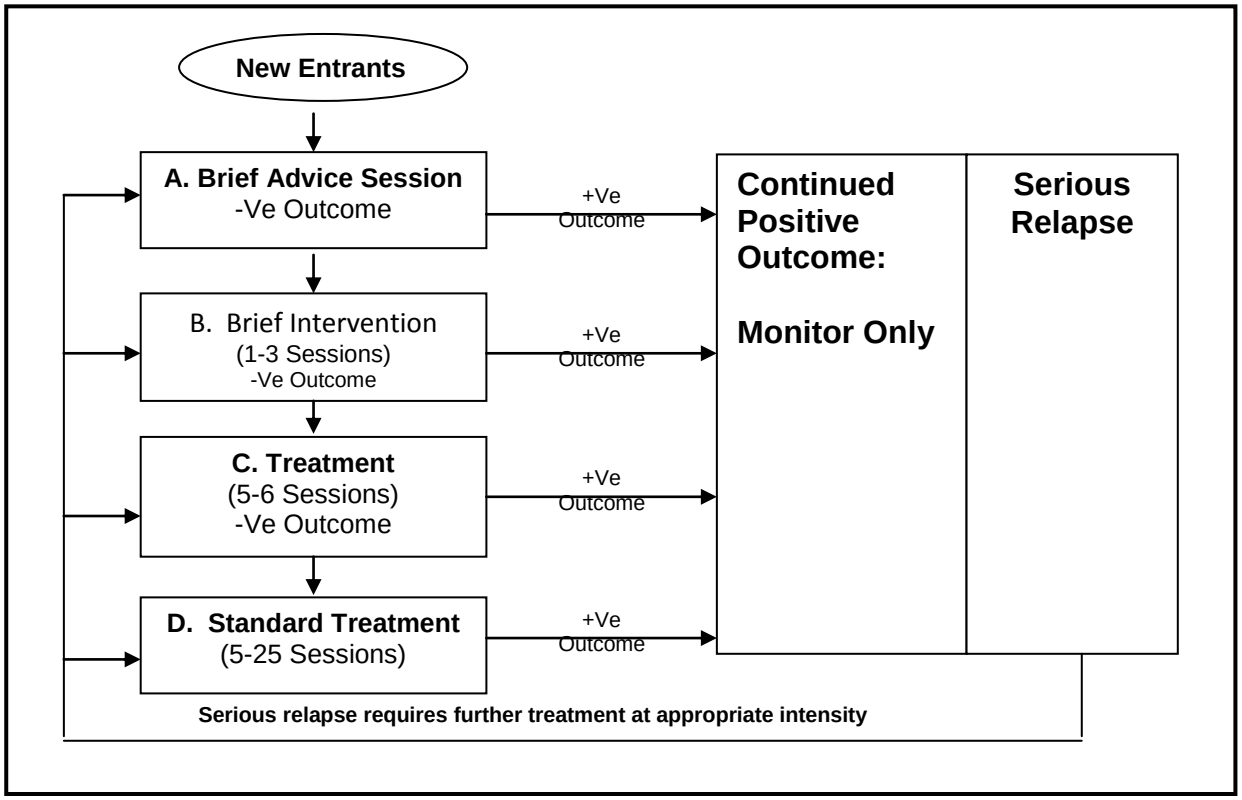

Figure 2: Stepped Care (Adapted from Sobell & Sobell 1993).

Clarity regarding the nature of drug and alcohol use also has profound implications for comprehensive assessment procedures. Historically, assessments have been poor in the field in general. This has lead to the evolution of ever bigger assessment tools. However, the reason that assessment has been poor is not embedded in the information gathering process but in lack of clarity regarding the purpose of assessment. Based on the definitions of substance abuse problems presented in this paper, the purpose of assessment becomes much clearer. A comprehensive assessment should establish the current levels of substance use in order to establish the severity of the client's dependence. This is necessary for gauging doses of prescribed medications. Secondly, the assessment should establish social functioning prior to the problem along with the current ruptures in social functioning that sustain usage. It is important to recognise that comprehensive assessments should not be concerned with too much historical detail regarding social functioning; rather it should focus on the relevance of key indicators in each life domain which the client feels are sustaining their use. This will allow for clear identification of which life domains need to be addressed through the treatment process. Again, those with limited damage to social functioning in 1-2 social domains may benefit from brief interventions or structured counselling as opposed to comprehensive case management.

The identification of key indicators should offer greater direction to the staff teams assessing and shorten the assessment process considerably. These efficiencies could be further enhanced by the use of 'opt out' options for each life domain. This includes an open question regarding the existence of any problems in this domain. Where the client does not report problems, the next question can be reviewed. This means that the triage and comprehensive assessment can be compressed into one

document. The assessment may also include other relevant clinical tools which will help measure the client's baseline outcomes at the outset of treatment which can be used to compare with post-treatment levels of functioning.

Comprehensive Care Planning

Care planning should not be a separate process to the comprehensive assessment but a direct continuation of the same process. Whilst the comprehensive assessment identifies the breakdown(s) in social functioning that contributes to use, the care plan should identify a treatment plan that address these specific ruptures. If the assessment plan and care plan are not linked specifically and directly, it renders assessment processes pointless. Furthermore, there is a danger in developing treatment plans that do not address the factors that are driving consumption. This will misdirect subsequent treatment rending it partially effective at best and irrelevant at worst. Therefore, care plans must tie-in directly with comprehensive assessments. Whilst there is no agreement on the exact dimensions of social functioning that should be assessed, clinical practice has highlighted critical areas. The domains that are selected for assessment should be exactly the same as the domains set out in the care plan. This will ensure that the focus of treatment is directed at the presenting issues raised by the client and may help prevent therapeutic drift.

A second issue is that whilst there has been increasing policy requirement for care plans to constitute a critical element of treatment, there are few effective care planned models. This makes the establishment of dissemination of best practice difficult where there is no clear standard to benchmark the quality of care planning approaches. In light of the research on the recovery process it is essential that the care plans focus on the re-construction of the client's attachment across every domain of their life. Whilst the emotional \ mental health of the individual psychology is an important component in this process it is not the only consideration. Housing, family, partnering, employment and education are all as equally as important. As generic counselling models are not particularly effective in addressing multiple problems, it is essential that the care plan is able to set goals in every area of the individual's life. This targeted approach then needs to be augmented by subsequent treatment. Treatment that is not directed at assisting the client achieving the goals of the care plan may be interesting and insightful but miss the presenting concerns of the client. Whilst this can be helpful it also means that the aims of the care plan must be addressed in other forums, increasing treatment hours not decreasing them. It is too common for separate comprehensive assessment, care plan and treatment models to be deployed that bear little to no relationship to each other. This hampers treatment efficiently significantly.

A third issue is the ability to bridge the client's awareness of problems as identified in the comprehensive assessment towards a meaningful care plan. The ability to do this is essential in light of findings in the recovery process. From the recovery research it is clear that the recovery process is not simply the reconstruction of broken attachments to pro-social groups. It is underpinned by how the client values these attachments. Developing care plans that are capable of achieving both goals is essential for the change process to stick.

The Community Reinforcement Approach (CRA) is one of the few treatment models that offers a clear framework in the care planning process. Based on behavioural principles, it was first pioneered with highly excluded dependant drinkers but has broadened to address all substance misuse problems (Abbot et al 1998). The effectiveness of the models has also pioneered greater involvement of behavioural approaches into addictions treatment which will be reviewed later. In terms of care planning, the CRA model offers a clear bridge between assessment and care planning. This is in the form of the Happiness Scale. However, this language does not translate well into a British sensibility and the tool has been adapted to offer greater clinical utility in UK populations in the form of the Life Audit (Harris 2007).

When a client is presented with a blank care plan they can often baulk at the scale of the task of how to reconstruct the catastrophic damage to their lives. The Life Audit is completed after the comprehensive assessment and invites the client to consider their current level of satisfaction in each domain of their life by rating them on a scale of 1-10. The scores offered by the client are then explored to identify what would need to occur in their lives to improve them. This offers a greater level of 'scaffolded' investigation of how the client's life could improve in every social domain. This information is then used to populate a care plan, based on the client's identified desires. This process allows a practitioner to tap into the client's natural motivational system improving compliance and treatment satisfaction rates. As a result, the CRA model has outperformed other approaches in the treatment the most chaotic or isolated clients (Miller 2001).

Domain	Satisfaction	Problem Frequency	What is like when lower than X?	What is it like when higher than X?
Drug and Alcohol	1 2 3 4 5 6 7 8 9 10			
Partnering	1 2 3 4 5 6 7 8 9 10			
Family	1 2 3 4 5 6 7 8 9 10			
Employment \ Training	1 2 3 4 5 6 7 8 9 10			
Housing	1 2 3 4 5 6 7 8 9 10			
Physical Health	1 2 3 4 5 6 7 8 9 10			
Mental Health	1 2 3 4 5 6 7 8 9 10			
Offending	1 2 3 4 5 6 7 8 9 10			
Social Recreation	1 2 3 4 5 6 7 8 9 10			
Values and aspirations	1 2 3 4 5 6 7 8 9 10			

Figure 3: Example of Life Audit (Harris 2005)

Treatment Modalities

In light of the research that has indentified a wide variance in addiction and dependence severity, it is essential that treatment options can account for this diversity. Tailoring treatment to the problem in this way ensures an efficient use of resources as well as offering clients a wider choice in services. However, the focus of these services should always harmonise with the domains and the goals established in the clients care plan to ensure treatment consistency throughout the process. In terms of treatment outcomes, there has been more extensive research conducted on alcohol modalities than drug treatment in general. However, as psycho-social interventions outcomes do not appear to differ from one substance to

another, these recommendations are liable to stand for those drug users with equivalent scores on DUDIT. Holder et al (1991) review of treatment outcomes was based upon 200 control studies of 33 treatment modalities. Therapies were assigned a score for each demonstration of a successful outcome and negative score for poor outcomes or inability for the intervention to demonstrate greater gains than its comparison. A weighting procedure was used to eliminate simple negation. Therapies based on their evidential weighting were then classified as described in table 7.

Treatments with Good Evidence	Treatment that are promising but not proven	Treatment with no evidence of effectiveness
- Social Skills Training - Self-Control Training - Brief Motivational Interviewing - Behavioural Marital Therapy - Community Reinforcement Approach - Stress Management Training	- Covert Sensitisation - Behavioural Contracting - Disulfirum (Antabuse) - Antidepressant Medication - Nonbehavioural Marital Therapy - Cognitive Therapy - Hypnosis - Lithium	- Chemical or Electrical Aversion Therapy - Education film \ lectures - Anxiolytic Medication - General Alcoholism Counselling - Residential Milieu therapy.

Table 7: Evidence of Treatment Effectiveness for Alcohol Problems (Holder et al 1991).

Miller et al (2003) have been engaged in periodic reviews of research on the outcomes demonstrated by different treatment approaches in addressing alcohol problems. These findings are compiled in a large table-*mesa grande*- where 381 trials of treatment are summarised. Again, this is restricted to drawing upon random controlled trials only. Outcome scores were established by rating whether these studies demonstrated strong positive evidence (+2), positive evidence (+1), negative evidence (-1) or strong negative evidence (-2). Each study was also weighted on 11 measures for the methodological soundness of the trial. These scores were then multiplied to give a final score that reflects the effectiveness of the treatment and the robustness of the research that underpins it. This gave a **culminate evidence score** (CES) for each of the 48 modalities tested, which are then ranked in order of effectiveness. This does give a bias to modalities which have been researched methodically; therefore the percentage of 'Excellent' studies is also included.

The *mesa grande* accords with Holder et al (1991) in many aspects, specifically in high ratings for brief interventions, motivational enhancement therapies, cognitive-behavioural control approaches and community reinforcement approach. Research has consistently demonstrated that brief interventions can be highly effective for problem drinkers. For example, Edwards et al (1977) randomly assigned hospitalised problem drinkers to either one session of advice where they were told they would be offered no more support or to a six month treatment programme. Outcomes were the same for both groups. However, independent studies have persistently converged on the conclusion that brief interventions such as motivational interviewing are effective *for lower order drinking problems*. As the severity of dependence and social exclusion increase, brief interventions are significantly less effective. Brief interventions are only appropriate for clients with no or mild levels of dependence (See Moyer et al 2002; Bien et al 1993; Emmen et al 2004; Slattery et al 2003). Brief advice interventions should be considered viable for opportunistic interventions at tier one. At tier two they could provide a time limited approach (1-3

sessions) where it may assist with lower level alcohol problems or support more comprehensive treatment planning for those entering tier three.

As the range of alcohol problems intensify to moderate and severe, more comprehensive treatment is needed. What is also striking in both meta-studies is that for more complex problems, interventions that increase the social integration of the individual show superior outcomes. This accords with research that identified that family stability, social support and improved marital happiness are all important factors in avoiding relapse. This provides yet more support to the idea of including the wider social network of the client in the treatment process. Surprisingly, relapse prevention scores low in the *mesa grande* (table 8). This may reflect that relapse prevention approaches that focus on triggers to use are not sufficient in themselves to arrest the wider social break down that may occur with problem drinkers. A more complete package of relapse prevention is needed that includes social skills training and behavioural control mechanisms as described by Marlatt and Gordon (1985).

Treatment Modality	Rank	CES	% Excellent
Brief Intervention	1	390	53
Motivational Enhancement	2	189	50
GABA Agonist (Acamprosate)	3	116	20
Community Reinforcement	4.5	110	71
Self-Change Manual (Bibliotherapy)	4.5	110	53
Opiate Antagonist (Naltrexone)	6	100	0
Behavioural Self-Control Training	7	85	52
Behaviour Contracting	8	64	0
Social Skills Training	9	57	25
Marital Therapy-Behavioural	10	44	44
Aversion Therapy, Nausea	11	36	17
Case Management	12	33	0
Cognitive Therapy	13	21	10
Aversion Therapy, Covert Sensitisation	14.5	18	0
Aversion therapy, Apnoeic	14.5	18	0
Family Therapy	16	15	0
Acupuncture	17	14	0
Client Centred-Counselling	18	5	13
Aversion Therapy, Electrical	19	-1	17
Exercise	20	-3	0
Stress Management	21	-4	0
Antidipsotropic-Disulfirum	22	-6	26
Antidepressant-SSRI	23	-16	0
Problem Solving	24	-26	50
Lithium	25	-32	29
Marital Therapy, Non-Behavioural	26	-33	25
Group Process Psychotherapy	27	-34	0
Functional Analysis	28	-36	33
Relapse Prevention	29	-38	31
Self-Monitoring	30	-39	50
Hypnosis	31	-41	0
Psychedelic Medication	32	-44	0
Antidipstropic- Calcium Carbimide	33	-52	0
Attention Placebo	34	-59	33
Serotonin Agonist	35	-68	0
Treatment as Usual	36	-78	13
Twelve Step Facilitation	37	-82	83
Alcoholic Anonymous	38	-94	29
Anxiolytic Medication	39	-98	0
Milieu Therapy	40	-102	29
Antidipsotropic-Metronidazole	41	-103	0
Antidepressant-Non SSRI	42	-104	0
Video Tape Self-Confrontation	43	-108	13
Relaxation Training	44	-152	17

Confrontation Counselling	45	-183	33
Psychotherapy	46	-207	21
General Alcoholism Counselling	47	-284	22
Education (tapes, lectures or films.)	48	-443	15

Table 8: Summary of the Mesa Grande (Miller et al 2003)

The central finding from this research is that goal directed and skills approaches appear to perform better than generalised approaches. This is important within the wider CRA context. The CRA model offers a range of treatment interventions to assist clients achieve their goals in each area of the Life Audit. It has been trialled in several studies in a modular format, with has included and excluded various elements of the programme in order to gauge which components contribute the most to its overall outcomes. Within this it has consistently demonstrated very good outcomes. This suggests that it may be the architecture of the CRA approach that is most useful. It provides a comprehensive and well targeted format to deliver interventions. It may be the fact that the CRA model offers a full curriculum of interventions to assist clients to achieve their goals in all life domains that is most critical. The actual type of interventions included in the curriculum can vary within this, as long as it is sufficiently directed at assisting the client to achieve their stated aims. This means that CRA format can 'house' a panoply of approaches which has specific relevance for practitioners and services according to local and national requirements. Within this structure the CRA framework has demonstrated positive outcomes for a wide range of problem substance use and client cohorts.

Common Factors

There is considerable currency in the field regarding the concept of evidence based practice. The assumption underpinning evidence based practice is that the effectiveness of a talking cure can be established as if it were a new medication. Clients with a similar range of problems are randomly assigned to 'gold standard' treatment modalities and the most effective models become recommended as the evidenced based approach that should be adopted in the field. There are a number of issues with this approach. Firstly, research teams in randomised control trials tend to use fairly high-functioning clients with more modest problems in order to retain subjects through treatment. Furthermore, additional measures are implemented to increase client retention which are not widely used in clinical practice. Finally, the central problem with randomised control trials is that treatment outcomes appear to be the same regardless of the treatment modalities deployed. For example, Project MATCH was a $36 million dollar randomised control trial that compared Motivational Enhancement, Twelve Step Facilitation and Cognitive Behavioural Therapy for problem drinkers. The researchers examined 64 different variables relating to outcome. The only variable that predicted outcome at treatment completion and at 10 year follow up was the working relationship between the client and the practitioner. This is not to suggest that models are not necessary, but rather type of model may not be the deciding factor in treatment outcomes.

Certainly, practitioners need treatment approaches to serve as a curriculum to deliver effective treatment. However, assessing the superiority of one counselling intervention over another in the treatment of any disorder is problematic. This is because the treatment modality itself is not the only variable that contributes to outcome. Any treatment intervention must be 'transmitted' through the practitioner

who is working with the client. These relationship factors in treatment are profound and can account for 9-40% variance in outcome regardless of the severity of the client's problems (Crits-Christophe and Mintz 1991). The strength of this alliance has consistently been the best predictor of treatment outcome (Barbor and Del Boca 2003: McLellen et al 1988). In Project MATCH, of the 64 different variables reviewed in one of the most statistically powerful research studies ever conducted, it was found that the alliance was the biggest predictor of treatment outcome, even at 10 year follow-up (See Miller et al 2004). In light of the significance of alliance factors, the NTA review of effectiveness of alcohol treatment demands that specific attention is directed towards the creation and management of an effective working alliance as central to treatment outcomes (See Raistock et al 2006). It is important to recognise that the alliance is not describing *any* working relationship. In random control trials practitioners are working to gold standard levels of intervention with treatment manuals with high fidelity to their design.

The development of the Outcome Rating Scales (ORS) and Session Rating Scales (SRS) is an important development in this area (See Miller et al 2005). The Outcome Rating Scale is a visual analogue scale where the client rates their current satisfaction in the domains of their own well-being, the close relationship, their social responsibilities and general well being at the start of every session. These scores are expected to follow improvements in line with normative performances. At the end of each session, the client rates the working alliance between themselves and their worker on the Session Rating Scale (SRS). This is based on Bordin's (1979) research which defined the critical functions of the alliance that include bond, agreement on goals, negotiation of therapeutic task and how well the session went generally. Where the client scores the worker below the cut off point, they examine what was missing from the session and adjustments are made.

As such, the ORS \ SRS provides two functions. Firstly, it provides a simple milestone measure of client progress as an outcome tool that is normalised against hundreds of other services working with a similar client group. Therefore the ORS does not simply generate outcomes but does so in comparison to the outcomes of similar agencies, offering a clearer evaluation of performance. Secondly, the tool provides a further dimension. Unlike other milestone tools, the ORS does not simply measure progress. The combination of the SRS allows the worker to respond to the client's progress or deterioration in order to *improve* the outcomes. Where poor scores are identified, the alliance can be examined in order to provide a better fit for the client. Where the client makes improvements, adjustments can be made to capitalise on what works for them. Miller et al (2005) found that the introduction of ORS \ SRS feedback tools doubled the size of clients achieving clinically significant outcomes in treatment and significantly reduced drop-out rates. Those with mental health issues were better off than 70 per cent of the waiting list, whilst those with drug and alcohol problems were better off than 86 per cent of the waiting list. Clients who failed to obtain feedback on the alliance were twice as likely to drop out and three to four times more likely to have a null or negative outcome. It is important to stress that this was achieved without specific training in anything other than the assessment tool itself. This is important as supervision and training is often ineffective in addressing the *in vivo* problems of client work. This also accords with Moos (2008) wider observation of treatment outcomes. His research suggested that 'fairly structured' treatment was optimal. This means that treatment needs to have

some flexibility to adjust to the client's needs. However, clients are better at assessing this judgement than the practitioner. The ORS \ SRS outcome tools build common factors into treatment by allowing clients to determine the treatment context within set frameworks. It is therefore recommended that ORS \ SRS tools be used as standard practice to monitor the quality of the alliance, regardless of the treatment modality being deployed.

Treatment Structure

If we assemble all these variables into a conceptual framework we have the following idealised model as described in figure 4. The top bar represents ruptures across the life domains of the individual. The two central pillars of treatment are increasingly intensive treatment options and the working alliance between the client and the practitioner. Whilst the working alliance remains a constant throughout treatment, the level of intensity of treatment is increased according to the social functioning of the client. This is indicated by their AUDIT \ DUDIT scores. The model assumes prescribing will always occur at the highest level of severity of dependence. The bottom of the table reflects the recovery process with the client re-constructing key life domains and integrating back in pro-social groups.

Substance Misuse		**Drugs\ alcohol** X	**Partnering** X	**Family** X	**Housing** X	**Employment** X	**Recreation** X	**Health** X	**Mental Health** X	The Alliance
Treatment Intensity	Induction	Screening Triage \ Comprehensive Assessment Life Audit Care Planning (if appropriate)								
	Advice	Good Social Functioning								
	Brief Intervention	Social Functioning Impaired in 1-2 domains								
	Structured intervention	Mild Dependence-Poor Social Functioning								
	Comprehensive	Severe Dependence-Multiple problems in most life domains								
Recovery		**Drugs\ alcohol** √	**Partnering** √	**Family** √	**Housing** √	**Employment** √	**Recreation** √	**Health** √	**Mental Health** √	

Figure 4: Ideal Treatment Structure

However this remains an idealised model. It does not account for the variance in motivation. This is important when motivation is considered in context of harm reduction approaches. As we saw earlier, the central reason why people enter into treatment is as a result of the negative consequences of use. At the same time, the primary outcomes of harm reduction and prescribing are to reduce the negative stressors that arise from use. Therefore, opiate prescribing clients demonstrate high motivation for change when they enter into prescribing programmes but as the negative consequences of use diminish the motivation for lifestyle change decays. This represents a conflict within treatment services. Central funding is primarily directed towards purchasing prescribing treatment but at the same time agencies are expected to produce positive lifestyle gains. But positive lifestyle change is not achieved through prescribing which primarily reduces harms. The net result is that agencies often find this policy direction difficult to square and that many substitute prescription clients remain parked on methadone for long periods of time, blocking through put. Often use diversifies into binge pattern drugs such as alcohol and crack cocaine use. One study found that 50 per cent of clients on methadone prescriptions met the diagnosis for alcohol dependence as well (Edwards et al 2003).

Traditionally, the issues of poor motivation whilst on substitute prescribing has been managed by the adoption of polar opposite responses. At one end of the scale, some services have adopted permissive prescribing regimes that tolerate adjunct use and may respond to it by increasing methadone dosages. In the case of reduction prescribing, permissive prescribing tends to drift into maintenance. Many practitioners support the idea of permissive prescribing, especially to non-responsive clients in light of harm reduction concerns. However, non-responsive clients are the least likely to respond to low threshold prescribing. They exhibit high drop-out rates and are most vulnerable to overdose once outside of treatment. Conversely, highly regimented regimes have been adopted that are stringent on adjunct use. Where clients do use opiates on top of prescriptions they are excluded from further treatment and discharged.

There is an interesting relationship between these two extremes. Clients seek help because of aversive consequences. They then enter treatment programmes where there are either no consequences or drastic responses to use. When ‘treatment consequences’ are applied to users we see a shift in their responsiveness. The more permissive the prescribing regimes demonstrate a pattern of high retention rates but very low improvement. Regimented regimes demonstrate higher drop-out rates but more positive outcomes in survivors (Iguchi et al 1988). for example, McCarthey & Borders (1985) compared 69 clients on unstructured and structured methadone programmes. Those on the structured programmes would have rapid reduction prescribing and exit from the programme for any use on top. The structured group achieved greater periods of abstinence and higher general treatment outcomes than the unstructured group. It also retained 53 per cent of clients compared to only 30 per cent on the unstructured programme. Numerous research studies have demonstrated that the threat of withholding treatment can increase motivation (See Kidorf & Stitzer 1993; Dolon et al 1985). However, it remains unclear as to what happens to those who do not meet the demands of the programme and exit treatment. They may have made less, but important, gains on low threshold methadone.

Research demonstrates that continued use on top of substitute prescribing has little to do with physical discomfort or with psycho-social stress but is primarily a boredom issue. Therefore, adherence to treatment regimes is a motivational issue as opposed to medical or psychological one. Rather than taking a polar approach to permissive or regimented positions on prescribing compliance it appears that the introduction of treatment consequences may prove more beneficial to treatment gains. Treatment consequences can be arranged on a spectrum from rewarding compliance and engagement to increasing aversive consequences for non-compliance. This is referred to as *motivated* stepped care. Clients enter prescribing on a standard treatment regime. Providing that they meet the requirements of the treatment programme they can be placed on lower demand treatment requirements along with treatment privileges such as take home doses. Should they not meet the standard requirements, treatment interventions may intensify, whereby they must also attend a non-responders group for a month. On successful completion of this be prompted back to standard care and have the opportunity to move treatment privileges. Failure to meet the enhanced treatment requirement may trigger further treatment sanctions such as split dosing or even 31 day reductions. But, should the client meet the requirements of these higher demand levels they move back through the motivated care system. It is important to note that a wide range of consequences can be applied, according to the ethos of the agency. See figure 5 for an example.

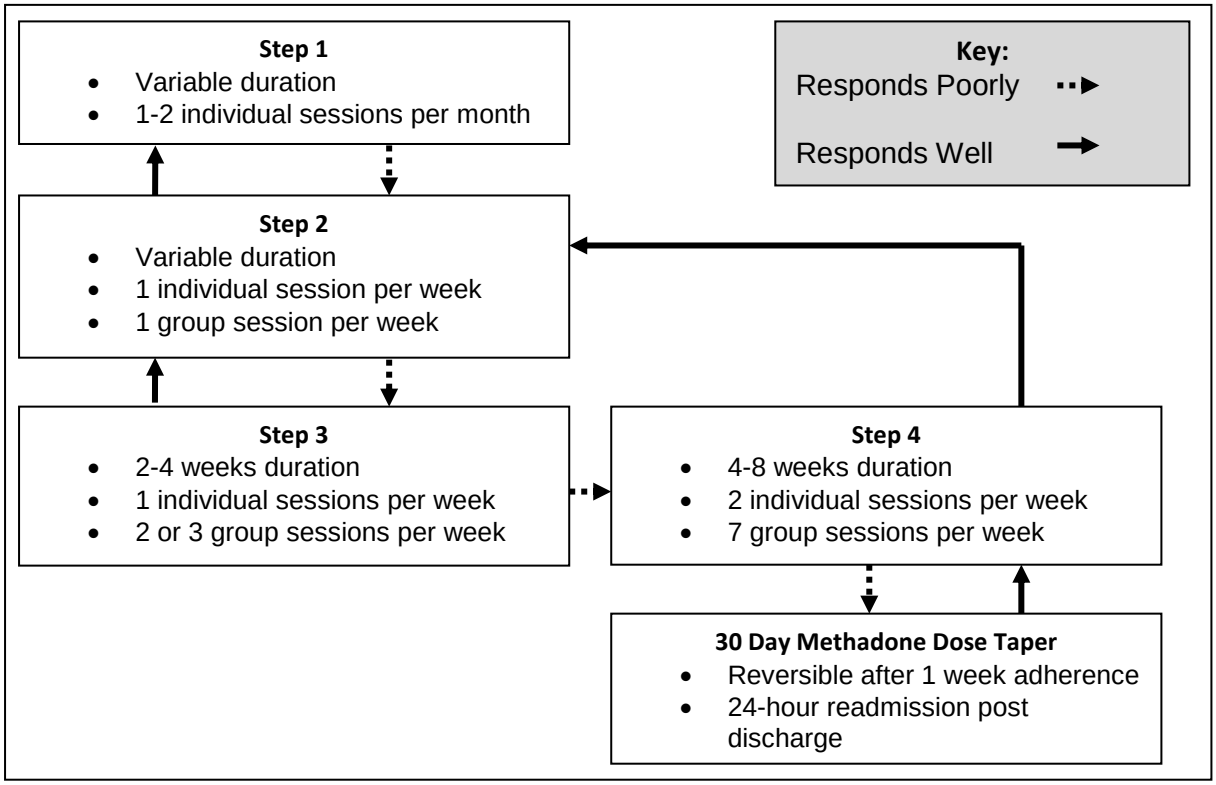

Figure 5: Motivated Stepped Care Model (Kidorf, King & Brooner 2005)
Patients begin treatment in step 2 and are advanced to higher or lower steps of care based on urinalysis results and counselling attendance. Patients who continue to test drug positive and / or miss counselling sessions in step 4 start a 30 day methadone dose taper that is reversed after one week attendance of full programme adherence. Those who research a methadone dose of 0 mg are rapidly readmitted to step 4.

Meta-analysis has demonstrated that motivated stepped care arrangements produce higher levels of retention. Griffiths et al (2000) found that 95 per cent of clients remained within the treatment systems and that the non-responders in low threshold models tend to demonstrate high responsiveness to the motivated step cared approach. However, in this US model, treatment resources become intensified on the low responders and treatment support is diminished on the high responders. This means that low-responders may be brought into line with high responders, but there is no incentive or additional support for high responders to exit treatment. In terms of increasing throughput- this structure can be reversed. Here treatment is staged to intensify on the high responders to invest in positive lifestyle change in order to move these more motivated clients through and out of the treatment system.

The targeting of limited treatment resources at high responders has other advantages. In current policy guidance all clients who are in receipt of a prescription are required to have a comprehensive treatment plan. However, as we have seen, many clients on prescriptions are not motivated to seek psycho-social support even though there is a requirement on all clients to be case managed. Where the ratio of prescribing to psychosocial resources is high, this places an increasing burden on staff teams. Valuable treatment time is lost in the pursuit and addressing the needs of unmotivated non-attenders or on DNA's. This creates a situation where treatment is directed at those who do not wish to enter into it and there is not enough resource to create a dynamic range of treatment and after care services for those that do want lifestyle change. Furthermore, the key-worker approach offers unmotivated clients access to support when stressors do arrive in their life neutralising their motivation for change further. As such, this may inadvertently contribute to the stasis that many clients experience.

By reversing this process, treatment resources are diverted to those that are both motivated and responsive, creating significant efficiencies in resource allocation. This does not mean that lower level responders are neglected or dismissed from treatment. It does mean that the levels of treatment investment will be proportional to the investment of the client. For those who do not want psycho-social support, they can be offered a lower order of support. This will focus on their immediate harm reduction needs. Through this mechanism treatment services can ensure that the basic health needs of low responders are met but the circumstances that may prompt change are not diminished. A lower level of treatment means that any psycho-social pressures that do appear will not be addressed through this treatment plan, but only the health concerns. Clients on lower schedules of treatment can access support from tier two services but it does not become routine in their care plans. Furthermore, access to diversionary activities and treatment privileges should be limited for this group and these resources re-directed at the clients who are motivated for change. The option to enter into high or low case management should be made by the client. These options should not be morally charged as either 'good' and 'bad' options, but rather as schedules of treatment that best account for the clients current motivation.

Offering clients the option to elect for treatment schedules that best reflect their current motivation and do not operate to diminish it is a more efficient use of treatment time. But even with this, treatment outcomes can be significantly enhanced for both client populations regardless of which treatment regime that they

enter. Research into treatment outcomes demonstrates that treatment gains are highly predictable. Long term treatment gains are predicted by early treatment response. The early subjective improvement that the client experiences in the first three weeks of treatment will be reflected in their gains at two year follow up (Brown et al 1999). Therefore, it is important that clients who enter into treatment feel early benefit if gains are to be maximised *regardless of which treatment schedule they eventually chose*. Therefore, rather than clients simply self-electing and entering treatment schedules at the outset, all clients should receive an early treatment intervention. All clients entering into opiate prescribing should complete a mandatory four week pre-treatment group which reviews their needs, motivation and choices. On completion of this group, clients can then elect for the most appropriate treatment schedule. The quality of the experience of this group as an early intervention will assist in maximising early treatment gains-regardless of the treatment schedule they subsequently chose. Once completed the client signs a behaviour contract stipulating their choice of treatment. This behaviour contract will set out the requirements of each treatment arm and the expectations of the service and the client. Non-compliance with higher support case management will result in the client being re-allocated to lower intensity case management. The conditions of these contracts can be negotiated with the staff teams who will have to ensure their implementation consistently across the agency. This will create a treatment system as outlined in figure 6.

Clients in high intensity schedules should receive a comprehensive treatment plan based on the CRA model that targets every domain of their life delivered by a named key worker. A range of structured interventions can be implemented that are directed towards assisting clients to achieve the stated goals of their care plan. Screening at the brief intervention stage should offer clear and consistent guidance on the most appropriate level of treatment intensity. A diverse range of interventions can be managed into the structure of treatment. For individuals presenting with lower AUDIT \ DUDIT scores, bibliotherapy materials should be made available for guided self-change. Alternatively, AUDUT and DUDIT scores of below 20 should identify the most appropriate client cohort for brief interventions as a ‘stand alone’ treatment. Brief interventions could include motivational interviewing or the WHO’s brief intervention model. Progress should be measured using ORS and SRS outcome tools. The brief intervention service will also provide the gateway to more intensive levels of treatment including prescribing. Comprehensive assessments can be conducted within this forum as well as AUDIT \ DUDIT to assess appropriate treatment response options with the client. The treatment schedule should be dynamic and address a range of needs, not simply the psychological. It should also include diversionary activities as well treatment privileges to ensure that the client experiences a varied and engaging programme of treatment. Information regarding treatment schedules should be made available to all professionals and concerned others.

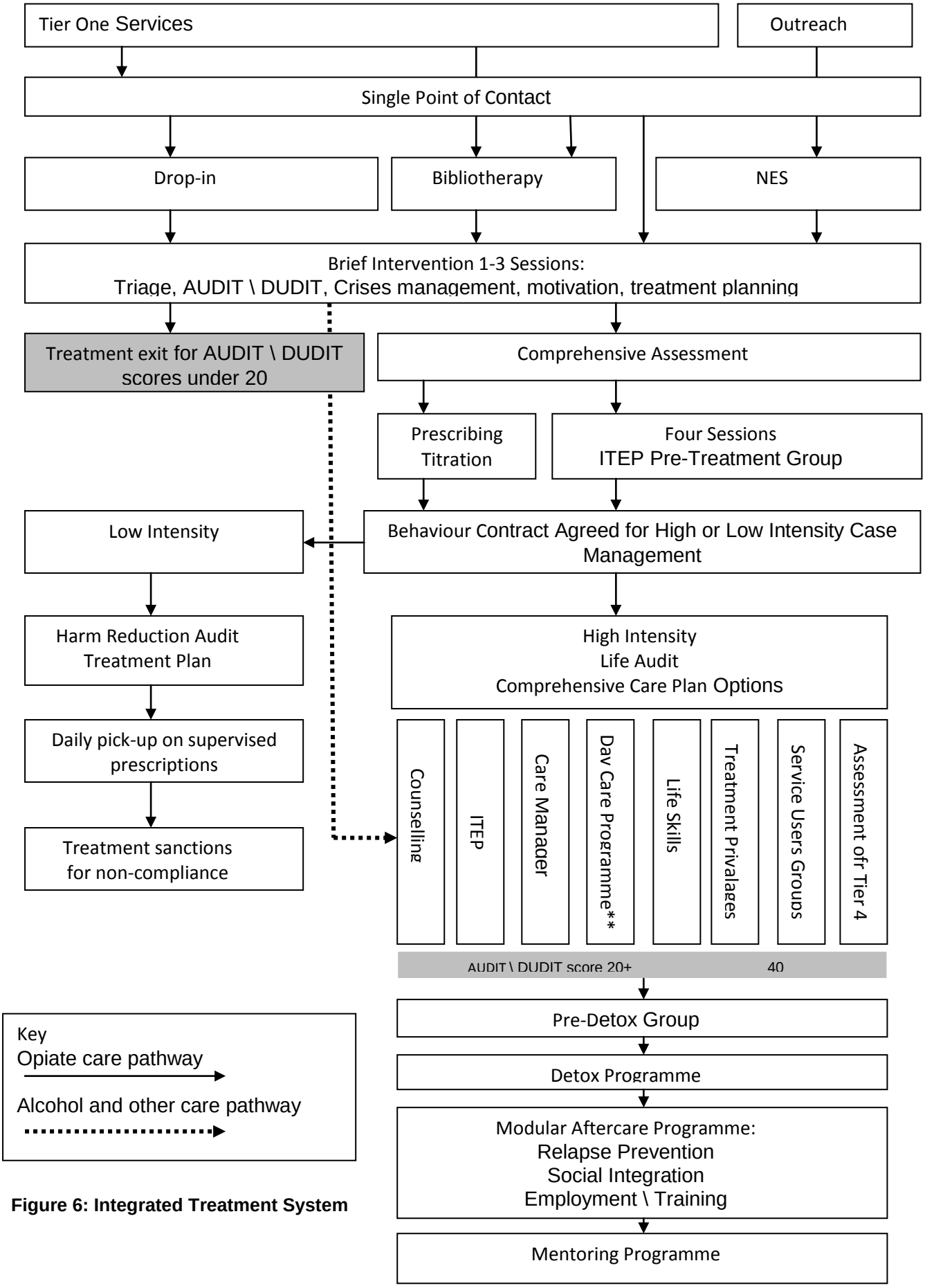

Figure 6: Integrated Treatment System

Within the options offered within the high intensity case management, treatment interventions should vary in intensity and provide interventions appropriate to the client's stated goals in their care plan. Even in this arm, not all clients will require comprehensive case management. Those with lower AUDIT \ DUDIT score in the range of 18-22 may benefit from counselling interventions alone. Counselling should utilise a range of identified counselling models and should be delivered as required by care plans rather than in a generalised eclectic / integrated style. Counselling can encompass a broad range of stated interventions such as controlled drinking programmes such as Behavioural Control Training (Miller 1983) or Five Stage Controlled Drinking (Sobell & Sobell 1993) for lower order problem drinkers. Behavioural Marital Therapy should also be considered as martial dissatisfaction and drinking are highly correlated. In this way the treatment system can house an alcohol service specification of stepped care for alcohol users and diverse range of options for case management of problem drug users. Those with more profound social break down can use counselling in combination with more intensive approaches where emotional problems limit their progress in other areas.

Wider treatment interventions can be selected according to the agencies own priorities, utilising models that are compatible with the teams value base. This could include cognitive and behaviour approaches which serve to increase the client's internal coping and resources as well as offer skills to improve wider elements of social functioning. The CRA, TCU and ITEP models of treatment are ideally placed to address these coping concerns. However, it is important that treatment address every area of the client's life domain and not simply the psychological. Again, this will allow for greater treatment efficiently where the clients stated goals can be met through the treatment intervention they attend rather than from the case worker. The case worker should be free to assist the client to generalise the learning from treatment interventions into other areas of the client's life rather than be the provider of interventions.

Those clients on low intensity case management will receive a treatment plan. This will audit their harm reduction needs in a focussed and systematic manner. This will ensure that their needs are met and their health is sustained. Consideration should be given to non-responders and a clear schedule of low order sanctions created and consistently applied. This need not apply to those who can demonstrate employment. Parents or those with dependents will not be eligible for the low intensity option. Research (Barnard 2007) demonstrates that substitute prescribing has little impact on the well-being of children and therefore, drug using parents will have a comprehensive care planned treatment response at the very least. Other exemptions for low intensity case management should be those on a legally mandated treatment order. Their required treatment hours will be drawn from the psycho-social provision of high intensity treatment options. Research demonstrates this has a beneficial effect on legally mandated clients (Angling 1998). Treatment outcomes for mandated clients appears dependent upon their engagement in diverse treatment populations. The lower the percentage of mandated clients in any treatment group equates with higher outcomes for this sub-population. As the percentage of mandated clients increases in any treatment group then outcomes appear to decline. This suggests that the level of actual involvement in treatment is highly influence by peer pressure within treatment to conform to the treatment

agenda. Low group motivation is reflected in the treatment outcomes for all participants.

Aftercare

Investing in the most motivated clients will free up resources which should be shifted toward providing effective after care to support people exiting the treatment system. The focus of after care should be explicitly on supporting the client to enter and manage pro-social groups. Following detoxification, a rich array of aftercare support should be provided. Again, this case management approach may not be required for all clients. Therefore a modular approach to aftercare should be adopted. Higher functioning drug and alcohol users may make use of relapse prevention but for those with higher levels of social exclusion, a care managed after care service may be required to foster greater social integration. A community profile of support services should be developed. Where there is existing provision in the community to support people to re-integrate, response priming approaches should be used to facilitate effective referral and take up of existing clients. Where gaps are apparent in the current range of provision, the after care service should look to development additional support. Mentoring opportunities should be made available to successful graduates, to support others but also augment their own treatment progress.

Again, aftercare attendance and treatment gains can be considerably enhanced through the use of behavioural principles. Research demonstrates that treatment gains in after care are not related to the intensity of the intervention but duration (Moos & Moos 2003). Clients who remain in after care services for three months show the highest long term treatment gains (Donovan 1998; Carroll 1997). However few clients remain in treatment for this period of time. It has often been assumed that treatment attendance in aftercare is related to the inherent motivation of the client- i.e. those who drop out subsequently relapse because they were less motivated to attend treatment in the first instance. However, research suggests that this is not the case. Treatment attendance tends to produce positive long terms outcomes rather than being symptomatic of clients who are successful (See Vannicelli 1978; Costello 1980). Retaining people in aftercare for three months therefore becomes imperative but the actual attendance rate can be highly flexible as it is the duration and not intensity that appears to be most important.

The CPR model has demonstrated superior treatment retention and outcomes in after care by adoption of behaviour principles (Lash et al 2006). CPR stands for ‘Contracting’-‘Prompts’-‘Reinforcement.’ This research demonstrates that clients who agree a behavioural contract regarding attendance, are prompted to attend sessions and rewarded for doing so, demonstrate higher completion and treatment outcomes. The rewards that were used in this study included reminders of the near landmarks in the treatment progress, certification, praise and affirmation of attendance by therapist and group members, inclusion on a roll call of honour and mementos of progress such as medallions. These cheap and cost effective measures dramatically improved outcomes.

Conclusion

This paper has demonstrated that ‘more treatment’ does not necessarily equate with ‘more outcome.’ Instead, a greater understanding of the nature of substance misuse disorders offers the ability to assess and titrate treatment according to the severity of the problem. Within this, broad differences may be seen between the provision of services for problem alcohol users and problem drug users. In drug using populations, those on long term substitute prescriptions present further challenges in their treatment response. However, the adoption of evidenced based and tested behavioural principles, can re-configure treatment services to enhance outcomes for those most receptive to treatment and preserve the well-being of the least receptive. Organising treatment responses according the severity of the presenting problem (alcohol) or motivation (opiates) can provide significant efficiencies in treatment services. This will not only allow for greater treatment investment in those that desire it but allows for the broadening of treatment and aftercare support. This will benefit clients whose stated desire is for lifestyle change and also create necessary through to ensure the optimal access to treatment for those who require it. This requires greater focus on the architecture of treatment rather than remaining limited to a given model of treatment. It demands a broad range of treatment options of increasing intensity, that is focussed on the clients stated needs across all relevant life domains that is delivered in a strong alliance. It is essential that within this that any service is able to reduce the harms of use whilst preserving the clients motivation for change. In a time of fiscal pressure of resources available to fund treatment, it is more important than ever that services are structured to optimum effect with the budgets available.

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