

STATEWIDE TECHNICAL ASSISTANCE PROJECT: DEVELOPING STATEWIDE ASSESSMENT STANDARDS FOR DRUG COURT PARTICIPANTS IN MICHIGAN

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Background

The Michigan Drug Court Grant Program (MDCGP) was established in 1999 to assist counties to develop new drug courts, enhance existing programs, reach additional populations, apply innovative treatment approaches, and coordinate existing services for drug court participants. The program is administered by the State Court Administrative Office (SCAO) and provides approximately \$2 million in funding annually to drug courts within the state. In 2006, SCAO developed a web-based case-management and data-analysis system called the Drug Court Case Management Information System, which is available to all drug courts in Michigan at no cost.

Michigan's drug court enabling legislation (2004 MICH. PUB. ACTS 224)¹ prescribes operational standards for drug court programs and administrative direction for SCAO. Among other provisions, Michigan drug courts are required to complete a preadmission clinical screening to determine whether each defendant is eligible for drug court according to specified inclusion and exclusion criteria described below. §§1064, 1066. Drug courts must also assess the risk of danger or harm to the individual, others or the community if the defendant is placed in drug court. §1064. Each drug court is further required to collect and provide to SCAO a minimum standard dataset to be specified by SCAO. §1078. Finally, the statute directs SCAO to "provide standards for drug treatment courts in this state including, but not limited to, developing a list of approved measurement instruments and indicators for data collection and evaluation. These standards must provide comparability between programs and their outcomes." §1078(6)(b).

The technical assistance (T.A.) request by SCAO stated:

[P]olicies for conducting substance abuse and risk assessments greatly vary among drug treatment courts and treatment programs statewide. Many different assessment instruments are used and are administered by various agencies and personnel. For example, in some jurisdictions a simple screening tool may be used by court staff to determine if a defendant is abusing drugs or alcohol while in other jurisdictions, a certified clinician must conduct a full clinical assessment before a diagnosis is made. The timing of screenings or assessments also varies. In some jurisdictions an assessment is conducted prior to drug court entry while in other jurisdictions assessments are conducted after a defendant enters a program. . . . Clearly there is a need for developing consistent statewide substance abuse treatment and assessment standards for drug court participants. . . .

Developing statewide substance abuse assessment and treatment standards would . . . provide consistency between jurisdictions in conducting assessments, improve the quality and efficiency of service delivery, and assist the drug courts and state agencies in reaching the goals intended in Michigan's drug court legislation.

¹ Hereafter, all statutory references are to this drug court enabling legislation.

Procedures

Dr. Marlowe provided a formal presentation on November 13, 2007 to members of the Michigan Drug Court Assessment and Treatment Standards Task Force established by SCAO. This Task Force consists of members representing the Michigan State Drug Court Advisory Committee, Michigan Association of Drug Court Professionals, Prosecuting Attorney's Coordinating Council, Department of Community Health, Office of Drug Control Policy, State Department of Corrections, SCAO and the substance abuse treatment community at-large. The presentation focused on differentiating various stages of assessment for drug court participants and identifying evidence-based assessment practices for each stage in the process.

Subsequently, Dr. Phyllis Zold-Kilbourn from SCAO and Ms. Doris Gellert of the Michigan Dept. of Community Health polled drug court treatment providers and coordinating agencies (CAs) to determine what assessment tools and assessment procedures are currently being utilized. The responses and copies of the instruments were reviewed by Dr. Marlowe and a draft consultant report with recommendations for statewide assessment standards was distributed to the Drug Court Assessment and Treatment Standards Task Force on March 3, 2008 for review and comments. A conference call was held to review the content of the report and the recommendations on March 11, 2008. The final report incorporating the Task Force's feedback was submitted on March 19, 2008.

Levels of Assessment

Figure 1 depicts the successive stages of assessment for drug court participants. It is shaped like a pyramid because earlier stages in the assessment process serve relatively limited aims and commonly focus on a small number of variables, whereas latter stages serve broader aims and focus on a wider range of relevant considerations. Each stage in the assessment process is discussed below with specific recommendations for measuring core data-elements at that level of assessment. Given budgetary constraints confronting Michigan, as most jurisdictions, recommendations are limited to a minimum dataset of variables that (1) have been reliably shown through empirical research to serve essential aims of assessment and (2) can be reasonably measured without incurring substantial additional costs for training or purchasing of new materials. In some instances, additional recommendations are offered for optional variables that either (1) evidence suggests measure important, but not essential, aims of assessment or (2) may require substantial additional expenditures for training of staff or purchasing of new materials.

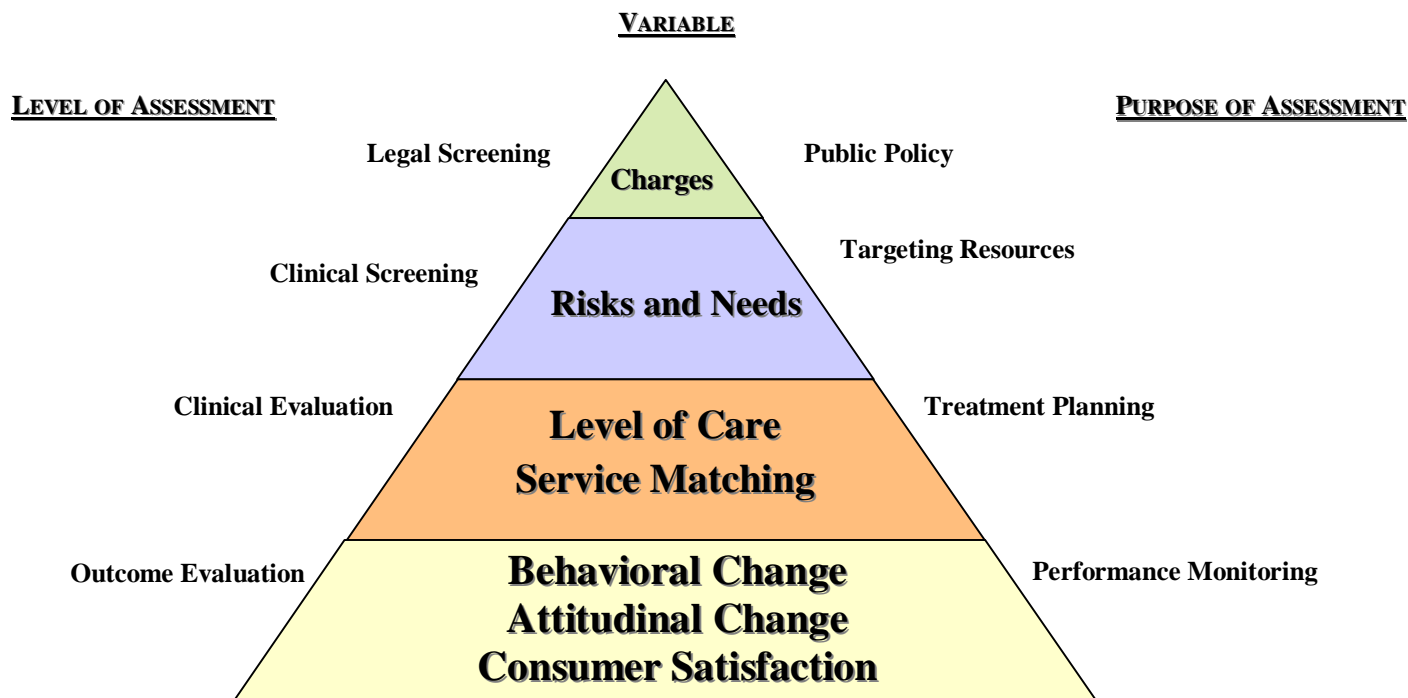


Figure 1: Assessment Pyramid

Legal Screening

Eligibility for drug court is commonly restricted to individuals charged with certain eligible offenses who do not have a history of an exclusionary offense. Therefore, the first stage in the assessment process requires a legal screening for current criminal charges and past criminal history. This stage of assessment is intended to serve public policy objectives by denying the opportunity for drug court to individuals who may be perceived as more morally culpable (e.g., sex offenders) or a threat to public safety (e.g., violent offenders). It is not necessarily based on empirical evidence or experience suggesting such individuals perform poorly in drug courts.

In Michigan, eligible offenses must be "related to the abuse, illegal use or possession of a controlled substance or alcohol." §1068(1)(a). The statute is not explicit about whether this may encompass offenses other than drug possession or DWI, such as drug dealing or theft, if the offenses are related to substance abuse. Discretion appears to be vested in the prosecution to initially approve such entries into drug court with ultimate approval being determined by the judge. §1068(2).

Michigan also excludes from participation in drug court any individual who has been:

- charged with a violent offense involving death or serious bodily injury to another
- charged with an offense involving the use of a firearm or other dangerous weapon
- charged with criminal sexual misconduct of any degree
- convicted of a felony involving the use or attempted use of force against another with the intent to cause death or serious bodily harm; §§1060(g); 1064(1); 1066(d).

In most jurisdictions, the legal screening is handled by the prosecution and involves a records check of relevant criminal justice databases. Michigan approves the use of the Law Enforcement Information Network for this purpose. §1064(3)(a). The T.A. request did not encompass this stage of the assessment process and no recommendations are offered at this time.

Clinical Screening

The clinical screening is intended to identify the appropriate target population for a drug court program. Unlike the legal screening, which primarily serves public policy objectives, the clinical screening focuses on identifying those individuals whom research suggests are most likely to succeed in a drug court as opposed to an alternative disposition.

Importantly, the clinical screening should be completed prior to an entry decision. Once an individual has been admitted to drug court, it may be considerably more complicated to withdraw the entry agreement and re-sentence the person. Michigan law requires a preadmission clinical screening to be completed before any individual is admitted to drug court. The purpose of the clinical screening is to determine whether the individual:

- *abuses controlled substances or alcohol*
- *is drug or alcohol dependent*
- *poses a risk of danger or harm to others or the community*
- *has other needs or circumstances that may affect the ability to complete treatment or abide by the court's orders.* §1064(3)(b) (emphases added).

Substance Abuse and Dependence

The first two factors — substance abuse and substance dependence — merit extended discussion. The basic philosophy of drug courts is that substance abuse or dependence fuel criminal activity; therefore, treating a substance use disorder is considered to be necessary, albeit perhaps not sufficient, to impact criminal recidivism. Where a clinically serious substance use problem is absent, this rationale is appreciably lacking and the individual is not suited for a drug court program.

Surprisingly, it is estimated that nearly 40 percent of criminal offenders diverted into substance abuse treatment do not have a diagnosable substance use disorder requiring treatment (Kleiman et al., 2003). In some studies, nearly one half of misdemeanor drug court clients and one third of felony drug court clients produced sub-threshold scores on structured clinical interviews, similar to a community sample of non-substance abusers (DeMatteo et al., 2006). This suggests that some individuals who perhaps are experimenting with drugs or alcohol or may be non-drug-abusing dealers are being diverted into these programs unnecessarily.

There are several possible explanations for these high false-positive rates (in this context, a false positive refers to the misidentification of an individual as being in need of substance abuse treatment

Clinical screening should be completed prior to entry into drug court.

when he or she does not, in fact, need treatment). One important factor is that many clinical screening instruments inflate the prevalence of substance use disorders (Peters et al., 2000). This is because the purpose of a screening tool is to cast a wide net and exclude only those individuals who clearly do *not* have a substance

use disorder. Subsequently, a more in-depth clinical assessment should be performed on the remaining individuals to confirm or rule-out the diagnosis. Unfortunately, many drug court programs employ a screening instrument prior to entry and complete an in-depth clinical assessment after clients have arrived at the treatment program. In many instances this is too late. A legal disposition has already been rendered and it may be complicated and costly to undo the disposition. Instead, it may be viewed as simpler and fairer to retain the individual in drug court despite his or her unsuitability for the program. This risks not only wasting scarce resources but disrupting the program for individuals who are truly in need of the services. The better course of action is to conduct a more focused and diagnostically precise clinical screening from the outset.

Current Practices in Michigan

An informal poll of Michigan drug court programs and CAs revealed that many programs use their own non-standardized screening instrument that was developed for local purposes or make determinations on the basis of clinicians' diagnostic impressions. An important limitation to this practice is the absence of common data-elements across programs and across counties. This will interfere with statewide efforts to identify client characteristics that predict relative success in drug courts and the ability to make cross-site outcome comparisons. Before comparing outcomes between programs, it is necessary to statistically adjust for differences in the severity of the client populations. This is called "case-mix adjustment." Unfortunately, without common measurement across programs, there is no way to accomplish this essential task. It is, in part, for this reason that the Michigan drug court statute requires statewide assessment standards to ensure comparability between programs. §1078(6)(b).

A second limitation to using unstructured interviews is the concern that some clinicians might apply diagnostic criteria imprecisely or unevenly. The official diagnostic criteria for substance abuse and dependence are contained in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (American Psychiatric Association, 2000). According to the DSM-IV, *substance abuse* reflects a repetitive pattern of ingestion under dangerous or inappropriate circumstances. This might include repetitive use of drugs or alcohol while working or in school, taking care of children, driving or operating heavy machinery, or interacting with friends or family. An additional criterion — which in and of itself may be sufficient to trigger a diagnosis of abuse — is recurrent legal problems. This can lead to the circular (and incorrect) reasoning that all arrestees for drug offenses are abusers, which could explain the high false-positive rate being seen in many drug court programs.

A correct diagnosis requires awareness of the following caveats:

- The individual must *repeatedly* use the substance over a period of *at least one year*. This excludes experimenters, infrequent users and non-using dealers regardless of whether they have been arrested for a drug offense.
- If the diagnosis is based on legal entanglements alone, the individual must *repeatedly* come into contact with the law. One or two drug-related arrests, by themselves, would be insufficient to trigger a diagnosis.
- The use must lead to *clinically significant impairment or distress*. If the individual has not been repeatedly harmed (e.g., by losing jobs, being evicted or having car accidents), has not repeatedly harmed others (e.g., by repeatedly neglecting children or getting into conflicts with friends or family) and is not seriously distressed by his or her usage, then it is misuse and not abuse. This is not to suggest that misuse is acceptable but it has not yet progressed to the point of a clinically diagnosable disorder.
- *Substance dependence or addiction* reflects a pattern of compulsive use resulting from neurological changes in the brain due to repeated exposure to drugs or alcohol. These brain changes are long-lasting and often permanent, meaning addicted individuals can rarely, if ever, return to controlled or periodic usage even after long intervals of sobriety. For such individuals, permanent abstinence is usually necessary. There are three prototypical features of addiction or dependence, any one of which would be strongly suggestive of a dependence diagnosis.
- Any ingestion of the substance precipitates a *triggered binge response*. Importantly, the term “binge” is often applied, wrongly, to describe ingestion of large quantities of a substance over short periods of time, such as on weekends. The correct definition is that any ingestion of the substance triggers an uncontrollable continuation of use. For example, an alcoholic who has one drink will typically continue to drink until unconscious, out of money, or stopped by external factors such as an accident or arrest.
- The individual experiences intense *cravings* or *compulsions* for the substance which are extremely difficult to resist and steadily build in intensity during prolonged intervals of abstinence. This should not be confused with a desire to use the drug or a fondness for the drug, but rather reflects intense longings and pressures that steadily build in intensity and may overtake conscious will.
- The individual suffers from serious *withdrawal symptoms* when levels of the substance decline in the bloodstream. Characteristic withdrawal symptoms for various substances of abuse are described in the DSM-IV and should be consulted to ensure the individual is not confusing withdrawal with a “crash” (i.e., depression or fatigue ensuing after an extended period of use).

It is not uncommon for cravings or withdrawal symptoms to subside when individuals have been contained in a controlled environment, such as jail or residential treatment, for an extended period of time. However, re-contact with the substance or paraphernalia associated with the substance (e.g., a crack pipe) often triggers a rapid re-emergence of the symptoms. Therefore, the general rule-of-thumb is to continue to score the symptoms as present unless they were continuously absent for at least 12 months while the individual was not in a controlled setting.

Given the importance of rendering a correct diagnosis of substance abuse or dependence, it is essential that screening tools be congruent with DSM-IV criteria and assessors be appropriately trained on the diagnostic issues just discussed. Unfortunately, many screening instruments employ idiosyncratic criteria based upon the test developer's theories and may not take careful diagnostic precision into account.

Tools Currently Used in Michigan

The poll of Michigan drug court programs and CAs indicated that when standardized tools are used for adult clients, they most commonly include the *Substance Abuse Subtle Screening Inventory* (SASSI), *Addiction Severity Index* (ASI), or *Global Appraisal of Individual Needs* (GAIN). Such tools are not well suited to this screening task. For example, most SASSI scales contain items that do not inquire directly about substance use but have been found by the test developer to discriminate between individuals with and without substance abuse problems. The rationale for using these "subtle" items is that many addicts tend to be in "denial" or "pre-contemplation" about their problem, and thus apt to under-report substance use. Therefore, it may be necessary to assess substance-related symptoms indirectly. Such an approach may not be well suited, however, to a criminal justice context in which over-reporting or malingering of substance use may be of equal or greater concern than under-reporting (Peters et al., 2000).

Although initial results of validation studies by the SASSI test developer were impressive with sensitivity (true positives) and specificity (true negatives) exceeding 90 percent (Lazowski et al., 1998), subsequent studies have been much less sanguine with true-positive rates below 70 percent (Pearson, 2000), sensitivity below 60 percent (Fuller et al., 1994; Svanum & McGrew, 1995) and unacceptably poor specificity (i.e., excessive false positives) (Peters et al., 2000). In one study involving juvenile offenders, the SASSI misclassified nearly two-thirds of non-abusers as substance dependent (Rogers et al., 1997). This suggests the SASSI could be expected to substantially over-estimate the need for substance abuse treatment among offenders.

The ASI was never intended as a screening tool. For one thing, it contains nearly two hundred items and even the "lite" version contains several dozen items. Second, it was not designed to render a diagnosis of abuse or dependence. Items and scales for the ASI were developed with the intent of measuring *change over time* in substance abuse treatment. This is why most items ask about events or symptoms that occurred within the previous 30 days. Clients might, for example, use drugs less often or experience less family problems from one month to the next, which is important for measuring the effects of treatment over time; however, it does not indicate whether an individual meets diagnostic criteria for abuse or dependence.

Some clinicians may attempt to classify the severity of clients' substance abuse problems using "interviewer severity ratings" (ISRs) on the ASI, which are essentially derived from the assessor's own clinical judgment. The research evidence is clear that the ISRs are unreliable, meaning different raters often come to different conclusions about the same client (Alterman et al., 1994). As a result, the test developers have advised against their use and dropped them from the upcoming 6th edition of the ASI. [Dr. Marlowe is a principal advisor on the development of the 6th edition of the ASI].

Another concern about using the ASI prior to entry into a drug court is its susceptibility to the issue of *days at risk*. Because the ASI measures events occurring within a 30-day window, if a client had been in a restricted environment, such as jail or residential treatment, prior to being screened for drug court, this could systematically deflate the apparent severity of his or her problems. Clinicians may attempt to compensate for this problem by calculating the proportion of days the client engaged in various behaviors while he or she was free in the community or by inquiring about the 30 days immediately preceding entry into a restrictive setting. Unfortunately, there are no published studies indicating whether this approach is valid or reliable and how it could alter the assessment results.

The GAIN is a very comprehensive tool (longer than the ASI) which takes about 1½ to 2 hours to administer. Many of the GAIN scales are useful for treatment-planning and determining the level or modality of care a particular client needs. As will be discussed, such information is required to be part of a full clinical evaluation once clients have entered the drug court program, but is more information than is needed or desirable for a preadmission clinical screening.

Shorter versions of the GAIN are also available, including the GAIN-Short Screener (GAIN-SS) and GAIN-QUICK (GAIN-Q). The GAIN-SS is designed to cast a wide net and requires further confirmation of a substance use disorder. Therefore, it would not be sufficient by itself as the basis for a preadmission clinical screening. The GAIN-QUICK is more detailed and could be used to assess substance abuse or dependence provided clinicians are carefully trained on the intent of the items. For example, one item inquires: "Have you used alcohol, marijuana or other drugs in larger amounts, more often or for a longer time than you meant to?" On its face, this item could appear to be asking whether defendants plan their substance usage in advance. However, it is intended to assess *triggered binge responses* (i.e., loss of control once usage has begun). If clinicians are not carefully trained on the correct interpretation of the items, they may substantially over-diagnose substance use disorders. This is true not only for the GAIN but for any diagnostic instrument.

Risk of Danger or Harm

The Michigan drug court statute further requires the preadmission clinical screening to determine whether the individual poses a *risk of danger or harm* to others or the community. §1064(3)(b). Because the best predictor of future violence is often a past history of violence, this requires attention to whether the individual has committed violent or aggressive acts previously. The legal screening (discussed earlier) should turn up past charges and convictions for violent and predatory offenses; however, the statutory definition of a violent offender in Michigan also includes individuals who are *alleged* to have committed a violent act or who have *admitted responsibility* for such an act. §1060(g)(i). Because Michigan law confers no right to be admitted to drug court, §1064(1), greater discretion can apparently be exercised (in a non-discriminatory manner) to weed out individuals who might present a risk to public safety even if they have not yet been adjudicated.

The GAIN-Q contains a Behavioral Health Scale that assesses antisocial acts such as bullying, threatening, lying, and conning other people. This scale could be used to screen for violence or predatory potential; however, many individuals are apt to downplay a history of violence and antisocial behavior; therefore, it is often necessary to interview “collaterals” (e.g., family members or employers) using the same or similar items to uncover such information in the course of a preadmission clinical screening. Relying exclusively on defendants’ self-report is apt to under-estimate violence potential.

Clinical Screening should focus on the specific data elements that are required by Michigan statute and that research demonstrates influence outcome in drug courts.

Other Criminogenic Risk Factors

Apart from violence potential, research indicates that attention to other criminogenic risk factors is also essential in any preadmission clinical screening. Criminogenic risk factors refer to those characteristics of offenders that make them less likely to succeed in traditional forms of treatment or rehabilitation and thus more likely to recidivate, often to the same or similar type of offense that brought them into the program. Importantly, in this context the term “risk” does *not* refer to a risk for violence or dangerousness, although some of the risk factors for violence and treatment failure do overlap.

Importantly, research consistently reveals that higher risk individuals perform *better* in drug courts as opposed to alternative dispositions, such as probation or diversion (e.g., Taxman & Marlowe, 2006). Low-risk offenders are less likely to be on a fixed antisocial trajectory and are apt to adjust course readily following a run-in with the law; therefore, due to what is called a “statistical ceiling effect”, intensive treatment and supervision may offer little incremental benefits for low-risk individuals at a substantial cost.

On the other hand, high-risk offenders frequently require intensive and sustained interventions to dislodge their entrenched, negative behavioral patterns.

This suggests that drug courts should ordinarily target high-risk offenders for their programs, providing the individuals do not present an immediate risk of violence or danger to public safety. Alternatively, drug courts should maintain separate tracks for high-risk and low-risk participants. Low-risk participants might, for example, be required to appear in court for status hearings less frequently than high-risk offenders, and might attend separate treatment groups. Research confirms that maintaining separate tracks in this manner can improve outcomes for both high-risk and low-risk clients while also conserving scarce resources (e.g., Marlowe et al., 2006, 2007). It also avoids the negative effects of mixing high-risk and low-risk clients together in treatment groups. Mixing these populations has been shown to raise the risk level, or lower the prognosis, for low-risk clients, in part by exposing them to antisocial peers (e.g., DeMatteo et al., 2006).

Drug Courts should maintain separate tracks for *high-risk* and *low-risk* participants.

Recommended Risk Variables for Drug Offenders

Among drug offenders, the most reliable and robust risk factors for failure in standard treatment or rehabilitation include the variables described below (e.g., Gendreau et al., 1996; Hiller et al., 1999; Kinlock et al., 2003; Marlowe et al., 2003; Peters et al., 1999; Roll et al., 2005). These variables should be assessed, whenever feasible, during the preadmission clinical screening. Importantly, none of these variables implicates a constitutionally protected suspect class, such as racial or ethnic minorities.

Risk Variables for Drug Offenders

- *Current age (in years).* A younger age during treatment (especially < 25 years of age) generally predicts poorer outcomes in substance abuse treatment and correctional rehabilitation. In part, this may be because the frontal lobe of the brain, which tends to restrain impulsive misbehavior, does not complete its development until about that age. In addition, the severity of criminal activity tends to wane naturally as offenders get older, a process generally known as “graying out” (e.g., Blumstein & Cohen, 1987).
- *Age of onset of delinquent activity (age in years).* An early onset of delinquent activity (especially < 16 years of age) tends to predict a more chronic and treatment-refractory course. This refers to a pattern of activities that would lead to an arrest or juvenile certification if detected by authorities. Isolated events or age-common activities such as graffiti would not be included here.
- *Age of onset of substance abuse (age in years).* An early onset of substance abuse (especially < 14 years) tends to predict a more serious and treatment-refractory course. In part, this may be due to the introduction of a neurotoxin (i.e., excessive amounts of alcohol or drugs) during a critical period of brain development. The human brain develops rapidly during early adolescence and disruptions at this stage can lead to long-lasting and perhaps permanent brain injury, including compulsive and severe addiction. This relates to regular abuse (at least monthly) and not to sporadic experimentation.
- *Prior felony or serious misdemeanor convictions (number of convictions).* Previous convictions for serious offenses almost always predict a more treatment-refractory course.
- *Prior unsuccessful attempts in substance abuse treatment (number of attempts).* The past is often the best predictor of the future, and if an individual did not succeed previously in standard substance abuse treatment the odds are statistically greater he or she will not succeed in the same type of regimen on a subsequent occasion. The appropriate course of action under such circumstances is to administer a more intensive intervention, such as drug court. Much of the research on this risk factor has focused on prior attempts at professionally administered treatments, as opposed to self-help interventions such as AA or NA. Therefore, it is recommended to assess prior experiences in formal treatment and self-help groups separately, and to determine empirically whether both predict poorer outcomes in less intensive standard treatment interventions.
- *Familial history of crime or addiction (number of first-degree relatives who have been engaged in substance abuse or crime).* Approximately 50% of the risk for addiction and repetitive criminality is genetic. In addition to sharing a genetic vulnerability with one's relatives, children may witness those same individuals role-modeling substance use or criminal activity. In this way, genetics and environments often conspire together to bring about an inter-generational transmission of crime and/or addiction. Therefore, individuals with these vulnerabilities often require more intensive and sustained interventions to interrupt their maladaptive lifestyles.
- *Negative associations (proportion of time spent regularly interacting with others engaged in substance abuse or crime).* The more often one interacts with others who are themselves engaged in substance abuse or crime, the greater the risk for treatment failure and recidivism. This correlation tends to be direct and powerful and therefore is an important risk factor to measure. It is commonly measured as a Likert-scale variable, for example ranging from 0 (“never interacts with such people”) to 3 (“sometimes interacts with such people”) to 5 (“frequently interacts with such people”). Importantly, because people tend to spend much of their time interacting with others living in the same residence, it is essential to determine whether family members or housemates are engaged in crime or substance abuse and to weight their influence accordingly on the Likert-scale. Research further suggests that female offenders are more likely to be influenced by substance use on the part of immediate family members and significant others, such as boyfriends or husbands; therefore, the influence of such individuals should be weighted accordingly.

Additional Optional Variable

- *Antisocial Personality Disorder (APD).* APD is an “Axis II” disorder in the DSM-IV that reflects a characteristic pattern of disregarding and violating the rights of others which begins by early adolescence and continues into adulthood. The individual must currently be at least 18 years of age and must have met criteria for Conduct Disorder (CD) by the age of 15 years. It is not necessary for CD to actually have been diagnosed by a professional, but only that the individual would have met criteria for CD had an evaluation been performed. APD reliably predicts poor outcomes in standard treatment, although individuals with APD can perform quite well in highly structured interventions such as drug courts, which include ongoing monitoring and graduated sanctions and incentives. Some clinical training and supervision is required, however, for assessors to make this diagnosis accurately. To the extent that programs can afford the expenditure of time and resources, it is strongly recommended they do so because APD is highly predictive of outcomes. Dr. Marlowe developed his own assessment instrument for this purpose which has been validated and published on, and is available free of charge. Alternatively, there are many other such instruments that can be recommended.

Recommended Risk Variables for DWI Offenders

Many Sobriety Courts in Michigan treat DWI offenders and it is important to assess specific risk factors for this population as well. Fortunately, many of the risk factors for DWI recidivism overlap substantially with those for drug offenses. However, there are a few differences which appear to be attributable, at least in part, to differences in socio-demographic characteristics between the two populations. For example, DWI offenders are more likely than drug offenders to be married or employed, and as a result these variables have significantly better predictive utility in a DWI population. Relatively few drug offenders tend to be stably married or gainfully employed, which makes these variables less useful for predicting outcomes.

The most commonly identified DWI risk factors include current age, marital status, educational attainment, employment status, arrest BAC, number of prior DWI arrests, and number of prior criminal convictions (e.g., Beerman et al., 1988; C'de Baca et al., 2001; Nochajski & Stasiewicz, 2006; Peck et al., 1993; Schell et al., 2006; Timken, 2002). Therefore, in addition to the risk variables discussed above, it is important to measure the following DWI risk variables:

- *Marital status.* This is typically measured as a categorical variable including married, separated, divorced, widowed, and never married.
- *Educational attainment (grades completed).* Many assessment tools automatically assign a value of 12 years of education for individuals who earned a high school GED (graduate equivalency diploma). However, there is a substantial difference between satisfying educational requirements on time and in due course, as opposed to taking a remedial route. Research reveals it is the actual number of grade years completed that is most predictive of outcomes. Therefore, this variable should reflect the actual number of grades passed successfully, and a secondary variable should reflect whether a GED was obtained.
- *Employment status.* It is important to assess both *current* employment status and the *usual pattern* of employment over the previous 3 to 5 years. This should be assessed as a categorical variable including regular full-time employment, regular part-time employment, irregular day-work or under-the-table work, unemployment, and other legitimate activities that may substitute for work, such as military service, full-time homemaking, full-time education, a confirmed disability, or age-appropriate retirement.
- *Arrest BAC level.*
- *Number of prior DWI arrests.*

Recommended Risk Factors for Juvenile Offenders

Research on criminogenic risk factors for juvenile offenders is far less developed than that for adults. Evidence suggests, however, many of the same risk factors apply for both adult and juvenile offenders (Cottle et al., 2001; Schwalbe et al., 2006). For example, age of onset of substance abuse or delinquency and number of prior offenses are highly predictive of outcomes for both adults and juveniles. Similarly, juvenile psychopathy and Conduct Disorder (CD), which are essentially adolescent precursors of APD, are highly predictive of outcomes. Finally, negative peer affiliations and a familial history of crime or addiction are also substantially predictive of outcomes. In addition, the following variables are relatively easy and inexpensive to measure, and research suggests may be further predictive of outcomes among juvenile drug offenders:

- *School behavioral problems.* This can be measured on a Likert-scale ranging from mild behavioral problems generally warranting a reprimand, to severe behavioral problems warranting suspension or expulsion.
- *Parental supervision.* This may be measured on a Likert-scale ranging from inattentive or ineffectual supervision by parents or guardians, to continuous and effective supervision.

Other Special Needs or Circumstances

The Michigan drug court statute requires the preadmission clinical screening to assess “other special needs or circumstances” that may affect the individual’s ability to receive substance abuse treatment or follow court orders. §1064(3)(d). It is not immediately apparent what this catch-all provision is intended to encompass, but additional factors that should be considered include the following. These variables appear to be equally predictive for drug offenders, DWI offenders and juvenile offenders:

- *Major Axis I Psychiatric Disorder.* Serious co-occurring psychiatric disorders, such as major depression, bipolar disorder, psychotic disorders, or organic brain syndromes, could interfere with an individual’s ability to attend to standard substance abuse treatment interventions or follow supervisory conditions. Such individuals may require medication management, structured living assistance, or other specialized services that are perhaps best provided in a mental health court, co-occurring disorders court, or other specialized program. The preadmission clinical screening should rule-out obvious and severe psychiatric pathology prior to entry into drug court. Many brief and standardized rating tools exist for this purpose (see Carey, 2002 for review).
- *Chronic and serious medical condition.* Serious and chronic medical conditions may also interfere with the ability to attend to substance abuse treatment interventions or abide by supervisory conditions. Typical medical conditions that are encountered among substance abusers include pancreatitis, cirrhosis of the liver, HIV, hepatitis, dementia, brain injury, heart disease, kidney damage, and diabetes. If the condition interferes with travel, cognitive functioning or daily living skills, the demands of a drug court program may be excessive for that person and a more sheltered disposition might be called for.

The GAIN-QUICK and GAIN-SS, which are currently being used by some courts in Michigan, contain brief scales that can be used quite adequately to rule-out major Axis I psychiatric disorders and serious medical conditions. Although these screening instruments should not be used to render a definitive diagnosis, they can flag potential issues for the court and prosecution to consider in deciding whether or not to admit a particular client into a drug court program.

RECOMMENDATIONS FOR THE CLINICAL SCREENING:

1. The clinical screening should be completed prior to entry into drug court. This is required by Michigan statute. §1064(3)(b). Once an individual has been admitted to drug court, it may be time consuming and costly to withdraw the entry agreement and render a new disposition, yet retaining the individual in the program has the potential of wasting scarce treatment slots and interfering with the functioning of the treatment programs.
2. It is not recommended to rely on non-standardized instruments or clinicians' individual diagnostic impressions. This will prevent comparisons between programs and risks unacceptable errors in diagnostic precision.
3. It is not recommended to use screening tools that cast a wide net. Rather, the clinical screening should focus on the specific data elements that are required by Michigan statute and that research demonstrates influence outcomes in drug courts. Of the screening tools that are currently in use in Michigan, the GAIN-QUICK (not the GAIN-SS or full GAIN) is best suited to this purpose, provided clinicians are carefully trained on the intent and scoring of the items.
4. Variables that should be measured in all preadmission clinical screenings include:
 - DSM-IV diagnosis of substance abuse (all 3 of the following)
 - Recurrent use over at least one year
 - Recurrent use in dangerous or seriously inappropriate situations
 - Significant impairment or distress
 - Diagnosis of substance dependence (at least 1 of the following)
 - Triggered binge responses
 - Cravings or compulsions
 - Withdrawal symptoms
 - History of violence or predatory behavior (yes or no)
 - Current age in years
 - Age of onset of delinquency
 - Age of onset of substance abuse
 - Number of prior felony and serious misdemeanor convictions
 - Number of prior substance abuse treatment attempts
 - Number of prior attempts in self-help groups
 - Number of first-degree relatives engaged in substance abuse or crime
 - Number of household members engaged in substance abuse or crime
 - Proportion of time interacting with others engaged in substance abuse or crime
 - Rule-out major Axis I psychiatric disorder
 - Rule-out chronic and severe medical condition that might interfere with travel, cognitive attention or daily living skills.

DWI Offenders

- Marital status (categorized as described above)
- Educational attainment (number of grades actually completed)
- GED (yes or no)
- Employment status (current and usual pattern; categorized as above)
- Arrest BAC level
- Number of prior DWI arrests

Juvenile Offenders

- School behavioral problems
- Parental supervision

5. Resources for training and supervision permitting, it is also recommended to use a standardized and validated instrument to assess DSM-IV Antisocial Personality Disorder (APD) and Conduct Disorder (CD). Dr. Marlowe can provide such an instrument free of charge. For an adult to meet criteria for APD, he or she must also have met criteria for CD during adolescence. Therefore, because CD is part of the APD diagnosis, the same instrument can be used for both adult and juvenile offenders.
6. Research indicates that drug courts should primarily target individuals who meet DSM-IV diagnostic criteria for substance abuse or dependence, and also manifest at least some of the criminogenic risk factors listed above (provided they are not an immediate risk to public safety). Individuals who do not exhibit these criminogenic risk factors should be treated in separate programs or separate tracks from the high-risk population. The criminogenic risk factors that best predict success in drug courts are, in order of empirical support:
 - Antisocial Personality Disorder
 - Prior felony or serious misdemeanor convictions
 - Prior substance abuse treatment attempts (professionally delivered treatments)
 - Early onset of crime (< 16 years of age)
 - Early onset of substance abuse (< 14 years of age)
7. The core data elements should be entered by all programs into an electronic database that permits immediate statistical analyses and should be transmitted at regular intervals (not less frequently than monthly) to SCAO. The data should not be stored in paper-and-pencil format or maintained in isolated spreadsheets. The data might, for example, be embedded in the Drug Court Case Management Information System.
8. It is essential to ensure assessors correctly apply official DSM-IV diagnostic criteria. Mandatory training in diagnostic assessment of substance use disorders (and ideally APD as well) should be required of all assessors as a condition of certification to perform drug court preadmission clinical screenings. Mastery of the training materials should be demonstrated through practice-scoring of assessment protocols and achievement of at least 80% inter-rater reliability on anchoring protocols. There is no compelling reason to distinguish between court personnel, community corrections officers and treatment providers in terms of basic competence to perform these screenings. With adequate training and supervision, each of these professional groups can usually be trained to criteria on basic clinical screening tools.

Clinical Evaluation

The purpose of a full clinical evaluation is to develop a treatment plan for the client. The clinical evaluation may be conducted after the individual has entered the drug court, but should be completed as soon as practicable thereafter to get the client off to a good start in treatment. Evidence suggests the longer it takes to start a client on a proper treatment regimen, the worse the outcomes and the greater the likelihood of premature dropout. As a general rule-of-thumb based on research, ordinarily no more than 2 weeks should elapse before the clinical evaluation has been completed unless the client has absconded or there are other unavoidable delays. The clinical evaluation should focus on (1) determining the indicated level of care and (2) matching services to client needs.

Level of Care

The indicated level of care for substance abuse treatment is typically derived from American Society of Addiction Medicine (ASAM, 2000) *Patient Placement Criteria*. Michigan requires CAs and other service providers to assess clients along all ASAM dimensions, which are as follows:

- Dimension 1- Acute intoxication & withdrawal
- Dimension 2- Biomedical conditions
- Dimension 3- Emotional and behavioral complications
- Dimension 4- Readiness to change
- Dimension 5- Relapse potential
- Dimension 6- Recovery environment

Based upon a client's status along these dimensions, a determination is reached about the indicated level of care:

- 0.5 Early intervention or prevention
- 1.0 Outpatient treatment (approx. 1 - 3 hrs/wk)
- 2.0 Intensive outpatient treatment (approx. > 9 hrs/wk)
- (2.5) Partial hospital or day treatment (approx. 4 - 8 hrs/day)
- 3.0 Non-medically monitored residential treatment (e.g., 28-day rehab.)
- 4.0 Medically-managed inpatient treatment (e.g., detoxification)
- Narcotic substitution therapy (i.e., methadone or buprenorphine)

As discussed earlier, many CAs and/or courts utilize the GAIN or ASI for their assessment tools. Although these tools are unnecessarily detailed for a preadmission screening, they are quite appropriate to use in the context of a full clinical evaluation and both generally provide sufficient information to render an ASAM determination. The full GAIN, in particular, includes scales specifically designed to assess relevant factors such as biomedical conditions, emotional and behavioral complications and readiness for change.

It is essential to document discrepancies between ASAM results and available treatment services. Studies reveal that correct ASAM placements produce significantly better outcomes than placements into lesser modalities of care than indicated by the assessment. Collecting such evidence in Michigan could assist in providing a convincing rationale for expanding treatment slots. It may also help to explain why drug courts in some jurisdictions may achieve relatively poorer outcomes. Some communities may have fewer treatment services available to their drug court participants, and the mismatch between clients' needs and the availability of treatment slots could in part explain differential success rates. This information could be used to justify enhancements in treatment services in specific counties.

This issue is particularly important in court-monitored programs such as drug courts. Evidence from other states has revealed, for example, that racial and ethnic minority clients may be placed into less intensive modalities of care despite having comparable ASAM profiles. This could implicate due process and equal protection issues. Careful attention should be paid to such matters to ensure there are no systematic disparities in the provision of services to drug court participants.

Research in other states has also suggested that some programs may reach ASAM conclusions in light of the services that are realistically available to their clients. For example, some programs may rarely conclude there is a need for residential services if residential treatment slots are not reasonably accessible in their county. This would be unfortunate, because it passes up the opportunity to document the effects of a gap in available services on client outcomes, which could help to guide future treatment appropriations. Careful attention should be paid to collecting and reporting ASAM data in an objective manner.

Service Matching

The second aim of a clinical evaluation is to identify client needs requiring attention in treatment and perhaps in specialized adjunctive services. "Multidimensional" assessment instruments evaluate problems in several life areas that are often affected by substance abuse and require attention for clients to achieve long-term sobriety. The most commonly assessed domains are employment, medical, psychiatric, family, and financial problems. Many multidimensional instruments exist for such purposes, including but not limited to the ASI, GAIN, Texas Christian University (TCU) Inventories, and many others. The National Institute on Alcohol Abuse & Alcoholism (NIAAA), National Institute on Drug Abuse (NIDA), and Center for Substance Abuse Treatment (CSAT) publish monographs reviewing the research evidence on these instruments (Allen & Wilson, 2003; Inciardi, 1994; Peters & Wexler, 2005; Rounsaville et al., 1993).

In Michigan, the ASI and GAIN are most commonly administered for the clinical evaluation of drug court clients. Both of these instruments have been extensively validated, particularly the ASI (Alterman et al., 1998; Cacciola et al., 1999; McLellan et al., 1980, 1985, 1992, 1993), and the ASI is the most widely used assessment instrument in the addictions field. Although, as discussed earlier,

the ASI and GAIN are not good choices to be used as preadmission screening tools, continued use of either of these instruments for treatment-planning and level-of-care purposes is justified. It would be important, however, to encourage all service providers treating drug court clients to administer a common instrument or at least a common core dataset of items, such as the items comprising the ASI “composite scores”. This would ensure that clients receive effective and appropriate services equally across jurisdictions, and would also allow for comparisons of client populations and outcomes across programs and across counties.

Again, it is important to document any discrepancies between multidimensional assessment results and the available services. If, for example, evidence suggested clients performed better in drug court or recidivated less often when they received needed psychiatric or vocational services, this could argue for the expansion of such services in the future.

RECOMMENDATIONS FOR THE CLINICAL EVALUATION:

1. The clinical evaluation may be conducted after entry into drug court but should be completed as soon as practicable thereafter. Ordinarily, no more than 2 weeks should elapse before it has been completed unless the client has absconded or there are other unavoidable delays.
2. Level of care assessments should include all ASAM dimensions and results should be reported irrespective of the services that are realistically available. The ASI and GAIN, which are commonly used in Michigan, often provide sufficient information to reach an ASAM determination.
3. A standardized multidimensional instrument such as the ASI or GAIN should be administered which assesses employment, psychiatric, medical, family and financial problems. Attention to problems in these areas has been demonstrated to influence long-term outcomes for substance abusers and addicts. The assessment
4. Ideally, all treatment providers serving drug court clients should administer a common instrument or common core dataset of items. This will ensure that clients receive effective and appropriate services equally across jurisdictions and will allow for comparisons of client characteristics, service delivery and outcomes across programs and counties.
5. The ASAM and other assessment results should be entered into an electronic database that permits immediate statistical analyses and should be transmitted at regular intervals (not less frequently than monthly) to SCAO. The data should not be stored in paper-and-pencil format or maintained in isolated spreadsheets. The items might, for example, be embedded in the Drug Court Case Management Information System.

Outcome Evaluation

Assessment should not be viewed as a one-time event. The purpose of a drug court is to improve client outcomes; therefore, it is necessary to measure whether such improvements are in fact occurring. In terms of monitoring client performance, evaluators typically examine three levels of outcomes: (1) behavioral outcomes, (2) attitudinal outcomes, and (3) consumer satisfaction.

Behavioral Outcomes

Behavioral outcomes are generally the most objective, easiest to measure, and often of greatest interest to policymakers and the public. The most obvious examples are reductions in criminal recidivism, reductions in substance use, attendance at treatment, and satisfaction of supervision conditions.

Criminal recidivism is most commonly measured by new arrests, new charges, or new convictions. There are pluses and minuses to each of these measures. For example, arrest information tends to be closer to actual events than conviction information, which may be influenced by such factors as plea negotiations or the sufficiency of evidence. On the other hand, individuals may be arrested for crimes they are not, in fact, guilty of, whereas convictions reflect a determination of guilt. The drug court field has settled on new arrests as the preferred measure of recidivism because of highly practical concerns (Heck, 2006), but collection of other recidivism measures is highly encouraged to paint as full a picture as possible. The reason for this is that criminal justice databases tend to be most accurate and reliable in terms of arrest and charge-related information, whereas conviction data are often incomplete or entered in an untimely manner. However, if conviction data can be reliably and accurately obtained in a given jurisdiction, this measure of recidivism would be equally useful and acceptable for evaluation purposes.

Rearrest, new charge and re-conviction data should be categorized according to the type or level of offenses using Uniform Crime Reporting (UCR) or comparable categories. Typically, data are reported separately for felony, misdemeanor and summary offenses and are further sub-categorized as follows:

- drug-possession offenses
- drug dealing/manufacturing offenses
- DWI offenses
- moving traffic violations and driving on a suspended license
- technical probation violations
- property offenses
- theft offenses
- violent offenses

Recommended Core Data Elements

Programs should be required to track and report on a core set of performance-measures while clients are enrolled in their programs. The performance measures should reflect the core outcomes of substance use, criminal recidivism, attendance at treatment and satisfaction of supervision conditions. Minimum data elements should include:

- Number and percentage of drug and alcohol-free tests
- Number of new arrests (categorized as discussed above)
- Number of technical probation violations
- Number of new charges and new convictions (optional; categorized as above)
- Number and percentage of substance abuse treatment sessions attended
- Number and percentage of adjunctive sessions attended (e.g., vocational training or psychiatric counseling) among individuals presenting with those identified needs
- Number and percentage of court hearings attended
- Program completion status (e.g., graduated, terminated, absconded, other)
- Length of stay (in weeks or months)

Importantly, all programs should ordinarily have ready access to this information and should not require additional resources to measure and report on these data. Tracking these variables is necessary for rendering effective clinical services. For example, it is not possible to conduct effective counseling without knowing whether clients have been attending their scheduled appointments, remaining abstinent and avoiding criminal activity. The only additional burden on programs, if any, would be to systematically enter the data into an analyzable database as opposed to individual client records or isolated spreadsheets.

Programs in Michigan, as in most states receiving block-grant funding, are also required to report Treatment Episode Dataset (TEDS) items at admission and discharge. These few items assess such issues as primary, secondary and tertiary substances of abuse, employment status and current living arrangements. Because these data elements are required to be collected anyway, they should be regularly reported to SCAO along with the above performance measures. This will provide additional information on client-level outcomes without incurring additional costs or burdens.

Attitudinal Outcomes

Attitudinal outcomes are typically measured using self-report instruments and focus on perceptions or beliefs that are hypothesized to influence behavioral outcomes. There is almost no limit to the number of such instruments that have been developed for use with substance abusers and offenders. The variables that have the greatest evidence for predicting drug court outcomes include the following. For programs interested in assessing these variables, Dr. Marlowe can describe the pros and cons of various assessment tools and the research evidence, if any, supporting their usage.

- Motivation for change
- Self-efficacy (a belief that one is capable of improving)
- Hostility
- Procedural justice (a sense that the procedures in the program are fair)
- Criminal thinking (holding antisocial beliefs or values)

Motivation for Change

A specific request was made for guidance in selecting tools to assess motivation for change. Among the most popular motivational assessment instruments are the *University of Rhode Island Change Assessment* (URICA) and the *Stages of Change Readiness and Treatment Suitability Scales* (SOCRATES). The URICA is primarily used for drug abuse and the SOCRATES primarily for alcohol abuse. These tools are derived from the “transtheoretical stages-of-change” (SOC) model. According to the SOC model, motivation for change is theorized to fall along a continuum of successive stages, ranging from “pre-contemplation” (being unmotivated for change) to “contemplation” (considering change) to “action” (taking steps towards change) to “maintenance” (focusing on avoidance of relapse). The goal is to match clients to specific interventions depending upon what stage they are currently in. For example, clients who are pre-contemplative of change would be matched to a motivational enhancement intervention, whereas those who are in action or maintenance would be matched to active behavioral or cognitive-behavioral interventions.

Although the SOC model has intuitive appeal and is popular among clinicians, it has minimal empirical support. Psychometric studies have consistently failed to confirm the hypothesized factor structure for the stages of change (Carey et al., 1999; Littell & Girvin, 2002; Sutton, 2001; West, 2005) and meta-reviews have found no evidence to suggest stage-based interventions produce better outcomes than non-stage-based interventions or usual-care treatment (Project MATCH Research Group, 1997; Riemsma et al., 2002).

Rather than attempt to categorize clients into specific stages of motivation, the most straightforward and effective approach appears to be to measure readiness for change as a single, dimensional variable. That is, people may range from being unmotivated, to being a little motivated, to being very motivated, but there do not appear to be discrete “stages” of motivation. Texas Christian University (TCU) has developed a family of assessment instruments designed to measure various

attitudes towards treatment, including the *Desire for Help Scale* and *Readiness for Treatment Scale*. Scores on these scales have been demonstrated to predict outcomes in drug abuse treatment (e.g., Simpson & Joe, 1993; Simpson et al., 1997) and it is recommended that Michigan adopt scales such as these to measure motivation for change. The ASI and GAIN, which are currently being used in Michigan, also include items or scales designed to measure motivation for change in this manner and could be used as well.

Importantly, it is typically necessary to re-administer motivational assessment instruments at regular intervals to gauge improvements over time. Evidence suggests motivation for change may not be essential when clients first enter a drug court program, because the coercive power of the court may be sufficient to induce positive results over the short term. However, if motivation does not subsequently develop over time, this could bode poorly for long-term change. Therefore, it is generally recommended to assess motivation for change on at least a monthly basis to detect improvements over time. The TCU scales were specifically designed to be re-administered at weekly or monthly intervals. They contain relatively few items, can be scored quickly (including via use of a scanner), and the items are worded so as to cover relatively brief time periods, such as the past week or past month. Information about the TCU scales and supporting research can be found at www.ibr.tcu.edu.

Consumer Satisfaction

Consumer satisfaction is a specific type of attitudinal outcome. It is relatively easy to measure, has the most direct implications for program improvement, and has been repeatedly shown to predict long-term outcomes. Although it may not be necessary for clients to feel fondly toward a drug court program when they first enter, if they do not begin to develop some attachment to the program over time this could bode poorly for outcomes. Many tools exist that measure consumer satisfaction or what is sometimes called the “treatment alliance” or “therapeutic alliance.” These instruments tend to be brief and easy for clients to fill out on their own. Therefore, they should not require substantial resources to implement them. And, because clients often appreciate being asked about their views of the program, they are likely to take the time to fill out the surveys. Of course, the data may be useless if clients are required to attach their names or other identifying information to the responses. It is best to have clients fill out the surveys confidentially making sure each client completes only one survey.

It is also important to include at least a few items relating to issues of cultural sensitivity (awareness of and respect for cultural issues) and cultural competency (relevant skills in culturally specific counseling techniques). Perceptions of cultural sensitivity, in particular, can be highly correlated with outcomes among minority clients. It is important to gauge whether minority clients feel culturally respected in drug courts and how they feel the programs might be improved, because this has been shown to correlate significantly with ultimate drug court outcomes.

There is no pressing reason to use standardized consumer satisfaction surveys. Programs should feel free to develop their own instruments focusing on the issues they feel are important to receive feedback about. Dr. Marlowe can share consumer satisfaction surveys for drug court programs that have been used in prior studies, and at no cost.

Additional Data Elements

SCAO has developed a Minimum Standard Data Set for drug court participants. Many of the data elements appropriately reflect the recommendations discussed above; however, variables recommended in this report that are not part of this data set should be incorporated. Some additional variables are also included in the Minimum Standard Data Set, which are defensible from the research evidence. For example, drug-free births during drug court participation, phase progression, and sanctions and incentives imposed reflect potentially important outcomes and process variables that may turn out to have important implications for drug court programming. To the extent programs can capture and report on these additional variables, they should be strongly encouraged to do so, so as to permit further analyses and evaluation of drug court programs in Michigan.

RECOMMENDATIONS FOR OUTCOME EVALUATION:

1. All programs should be required to track a core set of performance measures while clients are enrolled in the programs. As listed above, the core elements should include at a minimum:
 - Number and percentage of drug and alcohol-free tests
 - Number of new arrests (categorized by UCR or comparable categories)
 - Number of technical probation violations
 - Number of new charges and new convictions (optional)
 - Number and percentage of substance abuse treatment sessions attended
 - Number and percentage of adjunctive sessions attended (e.g., vocational training or psychiatric counseling) among individuals presenting with those identified needs
 - Number and percentage of court hearings attended
 - Program completion status (e.g., graduated, terminated, absconded, other)
 - Length of stay (in weeks or months)
2. Attitudinal measures involving such issues as motivation for change or criminal thinking should be encouraged but not required. Programs wishing to assess motivation for change are encouraged to use relatively briefer instruments that can be scored quickly and administered at repeated intervals. The TCU inventories are well-suited to this task.
3. All programs should be encouraged to administer self-report measures of consumer satisfaction and cultural sensitivity. Clients should not be required to attach their names or other identifying information to their responses so as to encourage honest reporting. Because clients' perceptions could be expected to change over time as they become acclimated to the programs, these measures should be re-administered periodically, at least every other month. Dr. Marlowe can provide examples of such instruments free of charge.
4. SCAO's Minimum Standard Data Set for drug court participants contains additional variables that are defensible from the research evidence, such as drug-free births, phase progression, and sanctions and incentives. To the extent programs can capture and report on these additional variables, they should be encouraged to do so because they reflect potentially important outcomes and process variables that may turn out to have significant implications for drug court programming.
5. Data on behavioral and attitudinal outcomes should be entered into an electronic database that permits immediate statistical analyses and should be transmitted at regular intervals (not less frequently than monthly) to SCAO. The data should not be stored in paper-and-pencil format or maintained in isolated spreadsheets. The items might, for example, be embedded in the Drug Court Case Management Information System.

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About the National Drug Court Training and Technical Assistance Initiative: Statewide Technical Assistance Project

Since 2002, the Bureau of Justice Assistance has awarded funds to the National Center for State Courts to provide technical assistance services to state-level agencies such as the Administrative Office of the Courts and the Alcohol and Drug Abuse Agency to:

1. Enhance the leadership of statewide drug court efforts;
2. Improve coordination and collaboration between the drug court agencies; and
3. Increase the likelihood of the institutionalization of drug courts into the mainstream of court operations.

Pursuant to these awards, the National Center for State Courts has provided technical assistance services to states that include:

1. On-site technical assistance;
2. Off-site technical assistance; and
3. A series of topical publications on integrating drug courts into mainstream court operations.

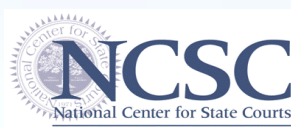
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