MULTI-SITE EVALUATION OF MULTISYSTEMIC THERAPY IN ONTARIO, CANADA:

Research Protocol for A Randomized Trial

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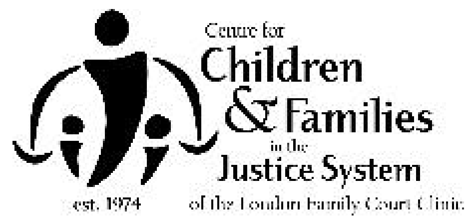

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OVERVIEW

This study involves the implementation and evaluation of a home-based intervention for high-risk Phase I young offenders called Multisystemic Therapy (MST). In agencies at four sites — London, Mississauga, Ottawa and the Simcoe County — teams of therapists have been trained in the provision of MST and are cooperating with the research. Referrals come from the community, typically probation officers or other case managers. Youths are considered candidates for MST if they are identified as having a high or very high risk of criminal offending in the future. Most will have prior criminal records and many have other presenting problems such as school refusal, substance abuse, parent/child conflict or conduct disorders. MST is a short-term intervention (three to six months) that involves the whole family. It is a home-based, family-based treatment that uses family strengths to improve family relations, peer relations, and school performance.

The research design involves assigning half of qualifying cases to MST and half to the services currently available to Phase I young offenders in the local area. There will be some pre- and post-testing of the treatment group and the controls and the youths will be followed for up to three years post-intervention, to gauge their subsequent offending and levels of service utilization. The goal of MST is to reduce the recidivism of high-risk young offenders and to reduce costs by reducing the use of incarceration and residential treatment. The study will run for four years and is being funded by the Ministry of Community and Social Services and the federal Department of Justice. The provision of MST is funded by the Ministry of Community and Social Services of Ontario.

REFERRAL PATHS

Each site has devised a local variation for securing referrals. The common goal is to select youths who are at high risk for committing criminal offences in the future, particularly those who are likely to be incarcerated as Phase I young offenders. A local priority should be to devise a referral strategy that limits referrals to the most appropriate cases and that refers potential candidates in such a way that no MST waiting list is created. In this section, we will examine the process that comes into play once a case has been referred to your agency, including how to apply the exclusionary criteria and how to prioritize multiple referrals.

Risk/Need Assessment

Predictions about criminal propensity are made with the Risk/Need Assessment form used by the Ministry of Community and Social Services. Most youths being referred through probation offices will have been placed into a risk/need category. In other cases, it will be necessary to complete the RNA or have the case manager make the assessment. The two categories in which we are interested are as follows:

High (27 to 34)
Very high (35 to 42)

The lower cutoff of 27 will be feasible only if there is a sufficient volume of referrals to meet the need for new MST cases. Should there be insufficient volume of “high” and “very high” cases at your site, the cutoff will be reexamined. At this point, clinical supervisors have the discretion to include so-called “high moderates” (scoring 21 to 26) during periods when there are not sufficient numbers of high and very high cases to fill available MST spots.

Override Score
Where a probation officer has used the professional override, you must use the category selected by the probation officer because this is the category recorded in probation data bases. Select only high and very high cases. If you observe a pattern that you receive largely overridden cases, we need to reexamine the referral path (e.g., disqualify overridden cases).

Cases without RNA Scores
In cases which are not referred from probation and/or do not have a risk/need score, it will be necessary to generate a RNA score. To accomplish this, sufficient background information must be available. Cases which are referred with no collateral information CANNOT be assigned a RNA score because the score will not be accurate. They must be excluded from the clinical trial, at least until more information is made available.

Referrals Under 12
In one site, referrals are being accepted for youths under 12 years of age, meaning they will have no official criminal record and no RNA scores. A modified version of the RNA has been made available to determine eligibility for MST.

Exclusionary Criteria

Youths become eligible for MST with the RNA score. That is the first criterion, but there are other factors that must be taken into account in the referral process. We will not screen cases for treatment amenability or exclude those with poor prognosis for success. However, there are three categories of exclusionary criteria:

< the situation of the youth is inconsistent with a family preservation modality of treatment

< the presenting issues of the youth are among those for which MST has not been empirically validated

< the case falls outside the jurisdiction of the Ministry of Community and Social Services

Exclusion of the case means that the youth does not qualify for MST (at least at this point but potentially later if the situation changes).

All cases of referred youth are compared against the exclusionary criteria to determine if they are appropriate for MST. The **first** category of exclusionary criteria require consideration of these three factors:

1. REQUISITE LEVEL OF “FAMILY” INVOLVEMENT

Being a family-based intervention, in order to apply the MST intervention a youth must have at least one person who will act as a parent or parent surrogate. A Crown ward in a stable foster placement could qualify for MST, as could a youth living with an older sibling or other relative. However, a Children’s Aid Society client in a new placement would not qualify, as there is no way to determine if the placement will break down. Typically, youths in group homes or other residential settings will not be suitable MST candidates.

2. CURRENT FAMILY THERAPY

If the family is already engaged with a therapist and is making gains, the intervention of a MST worker might not be suitable. Accordingly, a small number of cases might be excluded on this basis.

3. SAFETY OF YOUTH AND FAMILY

MST uses a family preservation model but some families cannot be preserved safely. When assessing the appropriateness of MST for referred youth, safety concerns override all others, whether that involves youths who are at risk of abuse, at risk of suicide, or at risk of harming other members of the family. MST is not a substitute for CAS involvement, in-patient hospitalization, or community safety through custody/detention.

4. RISK OF INJURY TO WORKER

Clinical supervisors, perhaps in consultation with the police or probation officers, have the discretion to disqualify a case from the clinical trial because of a risk of injury or harm to the MST worker while in the family home. It is anticipated that this exclusionary criteria will be rarely applied. This situation is NOT indicated merely by family violence or assault convictions.

The **second** caregory of exclusionary criteria pertain to the types of cases for which MST has been demonstrated to be effective. It has been tested on youths with many types of presenting problems, all of who have one thing in common: criminal behaviour. Based upon clear direction from South Carolina, there are two groups which are *in*eligible for MST at this point in time:

5. SEX OFFENDERS

Sex offenders must be excluded because MST has not yet been demonstrated as effective with this group (although a project is underway in South Carolina to adapt MST to this purpose). To be designated as a “sex offender,” however, requires more than simply a conviction for a sexual offence so some youths with convictions for sex offences may be included under the appropriate circumstances. Conversely, some youths with no convictions might be excluded as sex offenders if there is enough behavioural evidence that the youth is at risk to offend sexually.

6. SUBSTANCE ABUSE AS SOLE PROBLEM

We anticipate that a significant number of MST clients will present with substance abuse histories. The MST team in South Carolina have done research showing that MST helps facilitate entrance to and

completion of substance abuse treatment. Therefore, the existence of a substance abuse problem will definitely *not* disqualify a youth from MST eligibility. However, the MST group in South Carolina reminds us that, to be an appropriate candidate for MST, a youth must have problems which manifest themselves in criminal conduct. Accordingly, a youth with a substance abuse problem in the absence of criminal conduct with not be a suitable MST referral.

7. ACUTE PSYCHOSIS

A youth experiencing psychosis would not be a candidate for MST until stabilized on medication.

The **third** factor that guides our decision about excluding cases pertains to the jurisdiction of the Ministry which has provided the funding. The goal of the study is to determine the effectiveness of MST in dealing with those at high risk of committing future crimes and, therefore, at high risk of custody terms. A key intention of MST is to be able to keep high risk youth in their homes and out of residential placements such as custody.

8. AGE

In order to approximate a Phase I custody sample, we must cut off the maximum age of referred youth. Ideally, the majority of youth should be in the 14/15 range at referral. However, 16 and 17 years olds can qualify if they are facing Phase I charges or are on the caseloads of COMSOC probation.

Exclusion of cases at referral must be used sparingly, a decision made by the referral body and/or the clinical supervisor. Exclusion of the case means that the youth does not qualify for MST (at least at this point but potentially later). Make these decisions early in the process, before consent is sought from the family. We need to keep track of the cases where the exclusionary criteria have been applied. On FORM A, clinical supervisors are to keep *tallies* of the number of cases which were excluded after referral to your agency. If the number of excluded cases gets too high, we will have to reexamine the topic of exclusion and/or provide more information to the referral sources.

NB: Cases which are excluded may be re-referred at a later time if the situation changes.

Inclusionary Criteria

In sum, cases are eligible for the clinical trials if the safety of any parties would not be compromised by family preservation and if all of the following criteria are satisfied:

< high risk on the RNA (score of over 27 or overridden into the high or very high categories)

< under 18 years of age (although they may turn 18 during the involvement)

< not a sex offender

< the home is not judged to constitute a risk of injury or harm to a worker

< keeping the youth in the home will not place him/her or other members of the family at risk

< substance abuse is not the sole presenting issue

< there is enough family involvement for MST to be applied

< the youth is not psychotic at referral

< there is no existing agency involvement which would interfere with MST (or *visa versa*)

If a referred case satisfies these inclusionary criteria, the family may be contacted to determine if they agree to participate in the clinical trial (or in London the case can proceed to YAC).

Selection of Cases from Among Multiple Candidates

If you have more referrals than you have available placements, and therefore you need to select from among them, always pick the case with the highest RNA score or the cases which fall into the highest RNA category. If you have several cases that fall into the highest category, you may select them by geographical area to match the territory of the MST worker who needs a case. If you have a long list of potential candidates and want to select from among them in a random way, we can devise a system which is tailored to your needs.

SEEKING CONSENT

Once you have identified a potential candidate for MST, approach the family about participation. If they decline, or if they are randomly assigned to the control group, pick another case from the list. Keep picking until you have an MST case. The procedures for seeking consent are described in this section.

Release to Contact Family

Before the MST team contacts a family, that family must be notified that someone from your agency will be calling them about MST. In some sites, depending on the referral mechanism, this may have to involve a consent to be contacted form on your letterhead. The youth and parents should sign the form to indicate their agreement in principle to having their names passed along to the MST team. It should be clearly spelled out that signing the consent to be contacted does not oblige them in any way to participate in the study and that they are free to refuse consent once they are told about the study.

Signing the Consent Forms

Who will contact the family and where this will be accomplished will be worked out at each site. The Letter of Information for the potential participants provides a written explanation but, as part of the process, you must be assured that each person fully understands MST and what the study involves. This usually entails giving a verbal explanation after they have read the Letter and answering any questions they have. Once they

have agreed to participate, have them sign both of the two consent forms, one of which pertains to the study overall and one of which pertains to access to the police and correctional data bases we will be using in the follow-up. The latter one will remain in effect for four years, to allow us access to the criminal record information one year, two years and three years after the MST ends (or after five months post-intake for the control group). They keep the Letter and you take the consent forms. Keep the signed consent forms in the case file.

Ontario laws regarding consent from minors have been reviewed and we have determined that, from practical, methodological and legal standpoints, we must have both the parents and the youths sign the consent forms. In other words, to qualify for MST the youths and their families must consent not only to receive MST but to participation in the clinical trial. Consent to treatment and consent to the study are two different things. We want both, but we must have the latter.

Ideally, we want to convince all referred families to sign up for this opportunity. Even if we manage to keep the caseloads high, we have a problem if too many people refuse. One of the reasons is that we may introduce a volunteer bias if we take only those families that agree readily. By screening out the treatment-refusing youth and the opposed parents, we are watering down the test of MST. Any intervention can have high rates of success with treatment-amenable youth and compliant families. MST claims to be different in part because it can work in the tough cases. These are the kids whom we want! Your powers of persuasion and skills of engagement are crucial here.

For youths who are in care, the CAS caseworker signs the forms as legal guardian but you also need the verbal agreement of any foster parents for the MST intervention. If the parents are soon to regain guardianship from the agency, assess whether the referral could be delayed until the youth is home.

Seeking Consent in London

The referral path in London differs from those of the other sites in that youths are referred to the Safer Communities Program, of which MST is one part. An intake worker will assess each referred youth/family and complete the RNA instrument at the intake point. Cases falling above 26 are assessed against the exclusionary criteria and those that qualify are sent to YAC, to confirm that the case is appropriate for MST. YAC is a committee which meets every Tuesday and is made up of representatives of community agencies. It is the YAC which reviews referrals and decides to which Safer Communities Program the youth is best suited. Those youths assigned a RNA score over the cutoff are candidates for MST but this must be confirmed by the YAC members. They may well decide that another program is more suitable or the MST team may have a full caseload and so no MST referrals at all are possible.

If YAC confirms that MST is an appropriate referral, the case is passed back to the intake worker, who contacts the family and explains the MST process. The families are free to refuse participation (in fact YAC will have devised a contingency placement just in case this happens). If the family agrees and signs the consent forms, the intake battery is completed. The case then returns to YAC for random assignment and referral of the control cases to another Safer Communities Program.

Ethical Considerations

When speaking with the families about participation in the study, there are several ethical principles to keep in mind. The characteristics of an ethical study are that:

< there is no negative consequence for those who decline to participate

< there is no negative consequence for those who do

< potential participants are informed of all that is expected of them including all benefits and risks which may be associated with participation

< consent to participation is freely and voluntary given, with full appreciation of the above

< participants understand that they can withdraw their consent to continued participation at any point in the process

< all information gathered about them will be maintained in confidentiality

< anonymity is assured in that individual participants will not be identified in any report or document produced

For the MST clinical trials, the implications of these standards are these. Potential participants must understand:

< what MST entails, including the amount of time spent in the home, the intensity and duration of intervention and what is expected of the family

< that youth who decline to participate in the clinical trials will receive the same level of intervention they would normally expect in your community (i.e., they will not be penalized for declining consent)

< that half of those who sign the consent forms will be receiving multisystemic therapy which will commence immediately

< that half of those who sign the consent forms will continue to receive whatever intervention would have been available to them if no MST study had been under way (and that this intervention may involve being placed on a waiting list)

< that the decision about who gets the MST is made randomly so each person has an equal chance of being selected

< that the services offered to the control group are not a placebo or are not inferior but rather constitute the typical services available to youthful offenders in your community

< that participation in the clinical trials entails filling out some forms to gather background information

< that families are free to drop out of the MST condition

< that all information they provide will remain confidential except in three circumstances: 1) a person under 16 is at risk as defined in the *Child and Family Services Act*; 2) a person voices a fixed intention to harm a specific other person that must be communicated to the police; or, 3) the information is subpoenaed by a judge.

< that at one, two and three year intervals, the criminal records of the youth will be checked and that this information will not be revealed to anyone outside the research group

It is important to remember that no youth is being denied treatment. Because we will have more MST referrals than placements, it is inevitable that some youth will be denied MST. The random assignment gives each youth an equal chance of getting the MST intervention. It also ensures that only the most deserving candidates are referred in the first place.

Refusers

It is inevitable that a few families will absolutely refuse to participate. We need to keep track of both the number of refusers and the reasons they refuse to participate. FORM B has been developed for that purpose. Please complete a form in each case where the families are approached about participating but decline to sign the consent forms. Try and ascertain as many specific objections to participation as you can and record them on that form. A high rate of refusal will indicate that we need to modify the procedure for seeking consent. Knowing why people refuse can help us do that.

NB: Families which are initially categorized as refusers may be re-referred for the clinical trials if they still meet the inclusionary criteria and they later indicate a willingness to consider participation.

What if the youth agrees but the family does not? If the parents decline participation in MST, doing MST will be difficult, perhaps impossible. Even if the youth agrees, if the parents do not sign the consent form, the youth must be disqualified from the clinical trial. However, youths who are 16 and 17 can consent to be involved with the clinical trial and legally we could proceed without parental consent. You could explore the extent to which a member of the extended family could do MST instead of the parent. Use your judgment on a case-by-case basis. As a clinician, you have discretion about the likelihood of involving other members of the family in the MST process, or engaging the parents over time.

Can you do MST if the youth refuses? Apparently you could. But if they do not sign the consent form they cannot be a part of the clinical trial. We need to have their signed consent, no matter how old they are. One solution is to have treatment as directed as a condition of probation. This solves only half the problem, however. The probation order may mandate treatment, but it cannot mandate participation in the clinical trial. Nor would it be ethical to force a youth to grant consent under fear of penalty from the court. In sum, if the youth refuses to sign, the case must be categorized as a "refuser." Remember, however, that a youth can opt out of MST but the case can continue as long as the parents are on board. The family

qualifies for MST as long as the youth signs the consent forms, regardless of his involvement with MST.

INTAKE BATTERY

Part of the consent process involves an understanding that some forms need to be filled out before the process begins. Some of the forms are completed by the youth and some by a parent. The instruments have been chosen to reflect several key domains which MST might impact as well as to gather some socio-historical information on the family. From a research point-of-view, the information gathered will:

< tell us who the referred youth are
< be used to ascertain if the control and treatment groups are the same
< let us see which type of youth is most aided by MST
< help explain how MST works to prevent poor outcomes

From a clinical point-of-view, the information collected will be a valuable source of background information and the test scores can aid in identifying goals and potential targets areas for your intervention.

Location and Timing

The intake battery is administered after the consent forms have been signed and before the random assignment. Exactly where the participants complete the intake battery can be decided onsite. Anticipate that it may take two hours. All the forms are self-administered. Here are the options to consider:

1. seeking consent and administering the test battery in the office, providing a quiet area for test completion

2. seeking consent in the home and leaving the forms with the family, returning later or the next day to collect the forms and accomplish the random assignment

3. seeking consent in the home and waiting there while the tests are completed

If the youth and parents are not under the same roof, approach the youth first (assuming it is the youth who is most likely to decline participation)

There are five forms which have been selected.

Standard Client Information System (SCIS)
These forms, developed by Offord and Boyle as part of the Ontario Child Health Survey, are used already in many members agencies of the Ontario Association of Children's Mental Health Centres. We have secured permission to use the SCIS and therefore have access to the Ontario norms which were developed. In return, we are to accumulate the data on our cases and periodically submit the data file to the OACMHC. Several agencies already use this instrument and will continue to do so, except using our MST identifier numbers and identifying the cases as “project.”

There are eight different forms (four for intake and four for discharge). Four will be administered as part of the intake battery:

< Parent Questionnaire, Long (Intake) Form (for ages 4 to 18)

< Family and Household Questionnaire, Long (Intake) Form

< Youth Questionnaire, Long (Intake) Form (for ages 11 to 18)

< Teacher Questionnaire, Long (Intake) Form (ages 4 to 18)

Copies of these forms have been printed and distributed to the sites. We sent 75 of the intake set to each site. Keep us informed if your numbers get low.

The forms are self-administered (unless a participant has a literacy deficit). The household form has questions on tobacco and alcohol use that some respondents find objectionable. If you encounter too much resistence, we can adopt the version without those questions. The "parent" form is to be completed by the caretaker who knows the child the best. This might not be a parent in some cases. For children in care, foster parents can complete the parent form (but do not need to do the household form). The first question asks for the respondents relationship to the child.

The Teacher Questionnaire can be used if the youth and parents sign a release. Use your standard agency release form, although you should modify it to reflect the MST aspect and to mention that the information will be used for research as well as clinical purposes. It can be difficult to get teachers to complete and return such forms, especially in the case of high school students who have several teachers. For the MST youth, we suggest you take the form to the school as part of the process whereby you enlist the support of a teacher. Go through the principal (as Chris Hamel suggested) and identify the most supportive teacher. For the control youth, you can send them in the mail with a covering letter. If nothing is returned, a follow-up letter should be sent. If that does not work, we will try a follow-up letter from the London Family Court Clinic.

Beliefs and Attitudes Scale & Self-Report of Youth Behaviour
Developed by Alan Leschied and Steve Butler, this is an instrument similar to the *Criminal Sentiments Scale* but designed for use with adolescents. The *Self-Report of Youth Behaviour* is a corollary test which should be administered at the same time. Please photocopy these forms as needed.

Family Adaptability and Cohesion Evaluation Scale (FACES) - II
FACES is a 30-item scale that measures family adaptability (negotiation style, roles, assertiveness, leadership, discipline, child control, rules) and family cohesion (emotional bonding, coalitions, space, family boundaries, shared time/friends, decision-making, and shared activities). Family adaptability is defined as "the ability of a marital or family system to change its power structure, role, relationships, and relationship rules in response to situational and developmental stress." Family cohesion is defined as "the emotional bonding that family members have toward one another." There are four levels of family adaptability (rigid, structured, flexible and chaotic).

The four levels of family cohesion are disengaged, separated, connected and enmeshed. Combining these

eight levels yields 16 distinct types of family systems, of which the balanced types are thought to be the most viable for healthy family functioning:

EXTREME TYPES

chaotically disengaged
chaotically enmeshed
rigidly enmeshed
rigidly disengaged

MID-RANGE TYPES

chaotically separated
chaotically connected
flexibly enmeshed
structurally enmeshed
rigidly connected
rigidly separated
structurally disengaged
flexibly disengaged

BALANCED TYPES

flexibly separated
flexibly connected
structurally connected
structurally separated

The authors note that some of the extreme types can be found among some cultural groups and hypothesize that the extreme types will function well as long as all family members like it that way.

Please note that we are using the second version rather than the third of fourth one. The authors of the FACES recommend that the FACES-II is best for research. It is to be administered to both parents and to the youth. Permission to use the instrument has been secured from the authors. Information on hand scoring has been distributed for those who want to know the results. Computer scoring (a DOS program) is also available to those who request it.

NB: FACES-II has a reading comprehension level of grade 7 and is not suitable for use with those under 12 years of age.

NB: The authors suggest that as many family members as possible complete the FACES and you are free to do so if it would be helpful in some way (but the others will not be used for research purposes). We will use the form completed by the person identified as the primary parent.

Social Skills Rating System

There are three forms, one each for youth, parent and teacher with separate versions for elementary school

(grades 3 to 6) and secondary school (grades 7 to 12). Norms are available for learning disabled youth. Administration time is said to be 10 to 25 minutes and the literacy level of grade three. It can be hand scored or computer scored, the latter of which produces output which can be used in case planning. The scoring is a DOS program and can in installed locally on request.

Parental Supervision Index
A two-item parental supervision index is to be given to the youth.

Intake Packages

In sum, when you visit a family to ascertain if they will take part in the MST project, bring a package which contains the following forms:

< letter of information for participants (to be left with families who participate)
< consent form for MST
< consent form for criminal records check
< consent form to contact the school board
< Form B (in case the family refuses)
< SCIS forms, intake version (for parent, householder and youth)
< Beliefs and Attitude Scale (youth)
< FACES-II (for parent and youth)
< Social Skills Rating System (for parent and youth)
< Parental Supervision Index (youth)

As noted in the next section on random assignment, part of this package is an envelop which contains a piece of paper to indicate into which group the family will be directed.

Testing and the Control Group

The one possible problem with not scoring the tests on-site is an ethical one. The responses to the tests could indicate that a youth is at risk for suicide. The only one of the tests which could provide this information is the SCIS. There are two questions in particular on the Youth Questionnaire:

27. I deliberately try to hurt or kill myself
29. I think about killing myself

If either or both of these items are endorsed by a youth, you should pursue the issue further with the youth and, when age-appropriate, with a parent. If you want to undertake further assessment of the youth, use the “Hopelessness Scale for Children” and/or the “Reasons” for considering suicide form. We have also provided an “At Risk Protocol” for youth suicide developed by Dr. Linda Baker. All these instruments, in consultation with clinical supervisors, should help you determine if and to where a referral is appropriate.

RANDOM ASSIGNMENT

Once the consent forms have been signed and the intake battery completed, the case is ready for random assignment. The key tenet of random assignment is that each youth has an equal chance (i.e., 50/50) of being assigned to the MST condition. When this is true, you can assume that the two groups you create are similar in every way except for the intervention they receive. Initially, we talked about flipping coins but a better option has been selected.

The Envelope Please

Take small envelopes, about 20 at a time. In half, place pieces of paper that say "MST." In the other half of the envelopes, place pieces of paper which say "Usual Service." Shuffle the envelopes so you do not know their contents. Put together 20 intake packages, comprised of consent forms and the tests of the intake battery. Clip one envelope on to each. Take one of the intake packages along when you meet with a family to discuss MST. If you do not secure their consent, complete FORM B and try again. When you meet with a family who signs the consent forms, open the envelope when you are with them. In this way, you can inform them immediately into which group they have been assigned. Once you have gone through the 20 envelopes, you will have 10 MST cases and 10 control cases. At that point, make 20 more packages with 20 more envelopes.

Remember not to open the envelope until after the intake battery has been completed. In Barrie, there are separate pools of envelopes for each geographical area (i.e., 20 for Orillia, 20 for Barrie, etc.) to ensure that the ratio of treatment to controls is equal in each area. Once you get down to the last one or two envelopes in the pool of 20, it will be easy to guess what is in them. If you know that they are control cases, it can be hard to muster the energy to see the families. If that is the case, make up another batch of 20 and mix the remaining few envelopes into the new batch.

Case Identifier Numbers

Each youth who participates in the research as an MST-recipient or a control must be assigned a unique identifier number. (If your agency has a file number system to track your cases you may assign such numbers as well for your own files.) Once the random assignment has been accomplished, the number should be assigned. Develop a system so that no two cases are assigned the same number. Perhaps the clinical supervisor will take responsibility for assigning case identifier numbers. The numbers are recorded on FORM C, discussed below, and take the form of a five-digit number.

The first digit of the identifier number pertains to the site (listed in alphabetical order):

1. Barrie
2. London
3. Mississauga
4. Ottawa

The second digit of the number pertains to the result of the random assignment:

1. MST
2. Control

The next three digits are assigned at each site beginning with 001 for the MST group and 001 for the control group. The first control group member in Ottawa will be 42001. The first MST recipient in London will be 21001. Each individual will have a unique number. No individual is to be given more than one number and no number is to be used more than once. If either of these situations occurs, immediately consult the research coordinator.

Case Files

The majority of information will be gathered and kept about the MST group. However, there is some information that will be recorded about the control group. Specifically, there will be the tests from the intake battery, the consent forms, and Form C with the identifier information. Please make a file for each member of the control group. For the MST group, you may well decide to have two files: 1) administrative files with consents, tests, referral information etc.; and 2) the treatment file with fit circles, case notes and other clinical information. If your agency is amenable, the administrative files can eventually be sent (by some means that secures confidentiality) to the London Family Court Clinic so the information can be included in the data base and also so we can have the consent forms when we approach the police about gathering the follow up information.

IDENTIFIER INFORMATION

As always, your work with MST clients is confidential and any file material you accumulate will be stored in a locked or otherwise secured place. When we start to compile the data base at the London Family Court Clinic for analysis, the data will be recorded using the unique identifier number only. However, we do need to know identifying information to access the criminal record information. We need this information to track each youth in their subsequent involvement with the criminal justice system and, potentially, with non-justice residential services. At the very least, we would need to know full name including middle names, any other names they go by, and date of birth. In many data bases, there could well be several people with exactly the same name and it is not uncommon that some of them have the same date of birth. The address and names of mother and father also helps the police when they do the CPIC check.

To record this identified information, please use Form C. This form is to be completed when the case has been confirmed as a research case (i.e., consents signed and random assignment accomplished) and amended if information changes or more information comes available.

INTAKE PROCESS FOR MST CLIENTS

While you will have files on control group members, the greatest amount of information will be collected about the MST families. In agencies which have standardized intake forms and/or other requirements about information collection, continue to abide by these protocols. Some agencies need to conform to set standards, such as those of the Ontario Association of Children's Mental Health Centres. In addition, use whatever consent-to-involvement forms you already use at your agency. Have the families sign release forms to give you access to any third-party information you believe would be necessary (e.g., CAS). The most important of these will be the school. In sum, collect as much information as you need to provide the intervention and conform to your agency's protocol around information collection and record keeping.

NB: Remember that the school consent form needs to be modified to reflect the fact that the information will be used for research as well as clinical purposes.

The MST Adherence Measure

Research undertaken by the MST team in South Carolina has shown that positive outcomes are associated with closer adherence to the MST principles. They have developed a form which measures MST adherence derived from the nine principles, to be completed by the parent(s). (They also use the "family" form for youths but their young clients are older than ours and we have doubts about the ability of the youths to answer the questions). Note also that the therapist version of the form is no longer used.

We are going to use the instrument for the research to determine if poor outcomes can be partially explained by weaker adherence to the MST principles. It can also let us document how treatment integrity may increase as therapists become more skilled at MST over time. Above and beyond the statistical uses, clinical supervisors may use the information as part of their ongoing efforts to maintain treatment integrity.

MST tells us to use the form "as often as possible," in part because the scores are most helpful when averaged over a case. For research purposes, the scores will be averaged so the number of administrations can vary but should be at least three, including one at case closing. The instrument should be used with the family (or at least collected) by the clinical supervisor or other person who is not the MST therapist on that case. The best way is to administer the form is over the telephone. Another option is to have the therapist give the form to the family along with an envelop which they can seal once the form is completed. They might pick up the envelope at the next session. The idea is not to hide the responses from the therapist as much as it is to ensure that the family is comfortable in answering the items. In answering many of the questions, respondents make reference to the two or three most recent sessions. The authors of the form recognize that anyone can have an off day (therapists and families) but the results are tabulated with consideration of all cases put together so the odd bad session will be absorbed into the pool of good sessions.

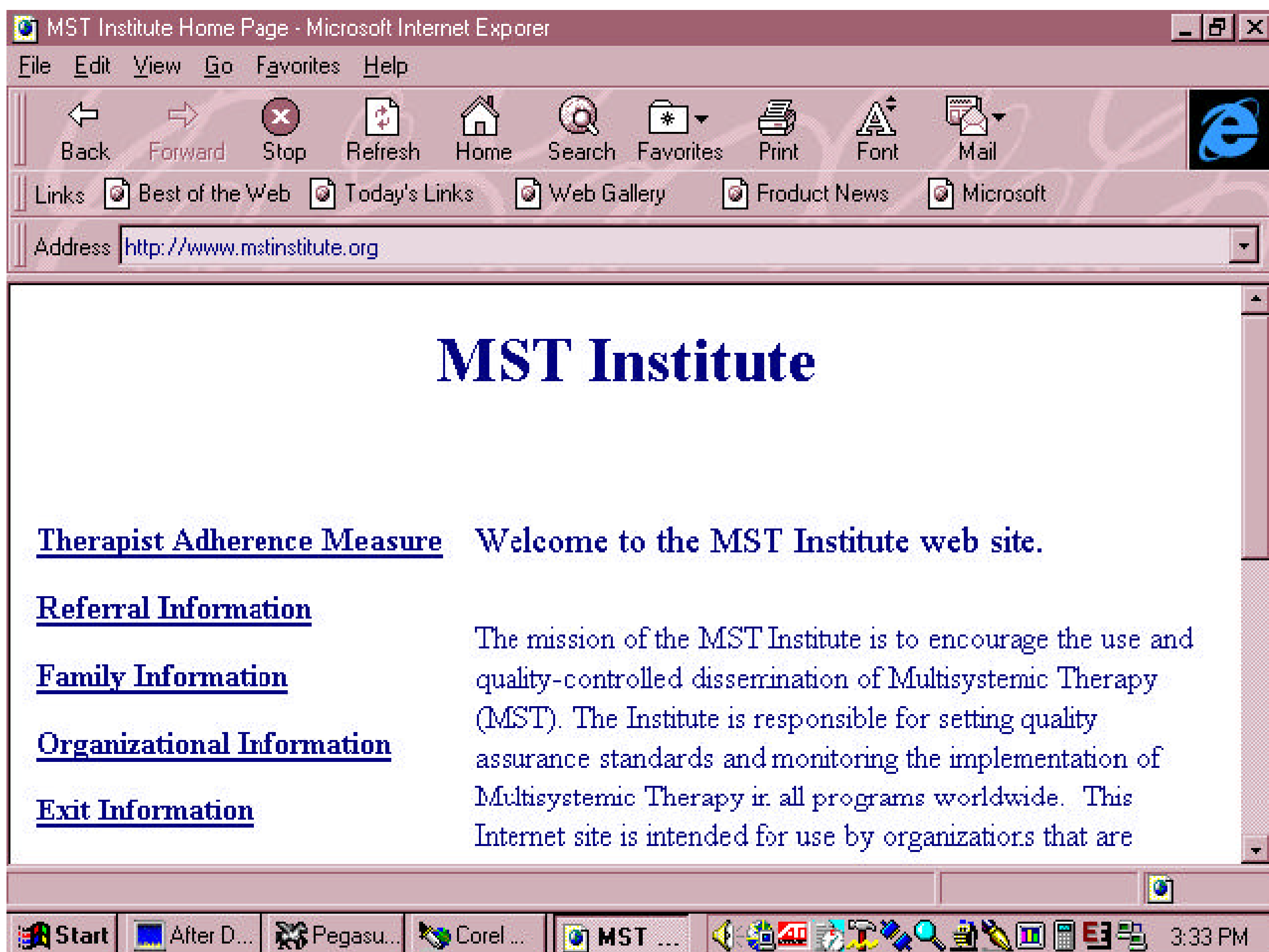
NB: because we are using average scores clinical supervisors are free to use the form as often as they wish (as long as they are consistent in when and how often it is used).

MST Adherence Study

We have been approached by the Family Services Research Center about participating in a study of MST dissemination that is funded by the National Institute of Mental Health. They have asked that sites use the MST adherence form (probably more often than we are now) and that the Clinic provide case specific information on the MST group, including information on subsequent arrest, etc. They also have an organizational climate survey which is to be completed every six months (in reference to your agency) and a measure of clinical supervision. When, or if, that study begins, we will devise an accommodation between their requirements and our resource limitations.

Scoring the Adherence Measure

The MST Institute has created a scoring protocol on their internet site that gives back real-time scores. The adherence form scoring is located on the MST institute web site, as illustrated below. Click where it says "Therapist Adherence Measure." There are three codes needed: team ID, therapist ID and family ID.



Team ID
The **team** IDs assigned to us are as follows:

London	2000
Mississauga	2100
Ottawa	2200
Simcoe Co.	2300

Therapist ID
Each **therapist** has also been assigned a unique ID number (see below). Any new team members will be assigned numbers chronologically.

TEAM ID# for London: 2000

Therapist ID#s for London Team

Michelle	10
Roger	11
Jodi	12
Kristen	13
Any new people	14, etc.

TEAM ID# for Mississauga 2100

Therapist ID#s for Mississauga Team

Kelly	30
Lisa	31
John	32
Tammy	33
Chris	34
Any new people	35, etc.

TEAM ID# for Ottawa 2200

Therapist ID#s for Ottawa Team

Vickie	50
Alain	51
Heather	52
Ned	53
Any new people	54, etc.

TEAM ID# for Simcoe 2300

Therapist ID#s for Simcoe Team

George	71
John	72
Stan	73
Lana	74
Laurie	75
Any new people	76 etc.

Family ID
For the **family** ID, take the five digit MST ID number assigned to each case (i.e., not the internal file number that your agency might use) and omit the first digit. That will leave numbers that begin 1001, 1002, 1003, etc. Each time you enter a form for the same family, the ID number must be the same so that the MST people can link them up. For them, a case ID might be 2200531001, meaning that the case came from Ottawa, from Ned, and was the first MST case that was opened there (i.e., case 41001).

Date of Completion with Family
This means the day the measure was administered, not the date the case was closed. Please take care to use the mmddyy format they have specified. No need to puts slashes or spaces between the numbers.

Administration
For the first administration of the test, chose the NA button. For subsequent administration, choose either "yes" if the person who completed the form was the same person who did it the first time. In many cases, we may not know that but, in the absence of another option, say "yes." If you know that the person is or was different, click "no." If you know the month but not the date of administration, use the 15th of the month.

Inputting the Items
This part is easy (just click the buttons) except for one thing: there are two versions of the form. Up until March 1999, we used the original version. A copy of the new can be printed off the internet. You can tell the difference by questions 16 and 20. On the original version, they read:

16. We didn't get much accomplished during the therapy session

20. The family was not sure about the direction of treatment

Now these questions read:

16. We got much accomplished during the therapy session

20. The family was sure about the direction of treatment.

Since they are flipped versions of the original, if you are scoring an original version of the form, take care to "rotate" the scale by scoring a 1 as a 5, 2 as a 4, 4 as a 2 and 5 as a 1.

Once at the bottom, click the "submit" button and in a few seconds the scores will appear. A

sample output is appended later. Note that even if one item is blank, the form will not score. Please print off a copy of the scores and leave them in the file where I can find them.

If you want to input another form, go back to the form page and click the “clear all answers” button on the bottom.

Once you have submitted the answers, they go into the adherence data base that the MST Institute is compiling. If you realize after submitting a case that some of the answers you put in are wrong, make the corrections and resubmit the whole thing again. Then notify Shirley Claytor of the error, noting all three ID numbers and the date of the case. She will have to take the first one out of the date base. Shirley is at extension 10 of the MST number or at shirleyc@mstservices.com

DROPOUTS

Families that opt out part way through the process would obviously be counted as drop outs. Where this happens, record as much information as you can about the reasons for this premature termination of the intervention (and the date of their decision). The more tricky issue comes when a youth goes into custody or is otherwise unavailable for an extended period of time. How long can you keep a file open, waiting to resume the intervention? Can you continue to work with the family if the youth is out of the picture? The cutoff that has been decided upon is 30 days (e.g., any youth drawing a custody term of over 30 days will be dropped). For purposes of statistical analysis, when you close a file on a case for a reason other than successful graduation/completion, the case will be categorized as a drop out.

NB: Once a youth has been “dropped,” he or she cannot resume MST.

DISCHARGE TESTING

When you close a file on a case (not including the drop outs) the tests from the intake battery should be re-administered. This information will permit documentation of the changes which occurred during their time in MST. Accordingly, when you close a case, have the parents *and* youth complete these tests:

< SCIS (discharge version which is shorter than the intake version)
< FACES-II
< Social Skills Rating System
< MST Adherence Scale

Also have the youth complete the parental supervision index and the Beliefs and Attitudes Scale/Self-Report of Youth Behaviour. ***Please ensure that the completion date is recorded on the form so the intake and discharge versions can easily be distinguished.***

There are two forms which a teacher will have completed at intake: the SCIS and the SSRS. Because

these assessments would be independent, it would be desirable to have the school forms re-administered when the case is closed. If you have a good relationship with a teacher, please ask him or her to complete the teacher SCIS and the teacher SSRS.

	PRE	POST	
	Intake (all cases)	MST Group (at discharge)[1]	Control Group (at 5 months post-intake)
FACES - Parent	U	U	U
FACES - Youth	U	U	U
Par'l Sup. Index - Youth	U	U	U
BAS - Youth	U	U	U
Social Skills - Parent	U	U	U
Social Skills - Youth	U	U	U
Social Skills - Teacher	U	U	U
SCIS - Parent (long)	U		
SCIS - Youth (long)	U		
SCIS - Householder (long)	U		
SCIS - Teacher (long)	U		
SCIS - Parent (short)		U	U
SCIS - Youth (short)		U	U
SCIS - Household (short)		U	U
SCIS - Teacher (short)		U	U
MST Adherence - Parent		U	

[1] If the case ends prematurely, only administer the discharge tests if at least three months have elapsed since the intake. If the period is shorter, do not repeat the tests.

Case Close-out Form

When a case is closed (be that from successful graduation or other premature termination), we will collect some global information which includes start and close date, therapist's name, number of sessions, overarching goals at the beginning of the process, changes in overarching goals, and several therapist ratings. FORM D, to be used for this purpose, is under development.

Discharge Battery and the Control Group

When a youth is assigned to the control group, he or she carries on with whatever plan is devised for them by their case managers, who often will be probation officers. In order to compare the changes in the MST group with changes that can normally occur in an adolescent population over time, we need to readminister the discharge testing to the members of the control group as well. Because there is no discharge point, we will arbitrarily choose five months post-intake as the target time for the second battery. The procedures for the tracking of control cases will vary among sites and is still being decided upon.

OUTCOME MEASURES

The two primary outcome measures are criminal conviction and service utilization. Access to this information has been secured with a court order. For transparency, written consent is also sought from all participants using the following consent forms.

CLINICAL TRIALS OF MULTISYSTEMIC THERAPY: FORM A

Tally of Cases Referred for MST but Excluded
from the Clinical Trials

Site: ____________________

Referral Period: ______________________________ to ________________________________.

Put a check mark for each case referred for MST but excluded, using only one category per case.

Referred youth was 18 or over:

Referred youth is a sex offender:

Referred cases was judged to put the worker at risk of injury:

Referred youth did not have enough family involvement:

Referred youth/family gainfully engaged in therapy:

CLINICAL TRIALS OF MULTISYSTEMIC THERAPY: FORM B

Reasons for Refusal to Participate in Clinical Trial

Site: Barrie London Mississauga Ottawa

Date Family Interviewed: ____

Name of MST Worker Who Met With Family: _______________________________

Age of the youth: ___________

Was youth in agreement to participate?

If no, what was the reason?

Was parent or parents in agreement to participate?

If no, what was the reason?

If different from above, what was the worker's assessment of why consent was not given?

CLINICAL TRIALS OF MULTISYSTEMIC THERAPY: FORM C

Identifier Info. For Tracking of MST/Control Cases

Case Identifier: [_____][____][____][____][____]

YOSIS / OMS / FPS Number: ______________________________
(circle which)

Referral Source: ____

Complete Name of Youth: ____

Others Names and Aliases Used: ____

Date of Birth: __________________________________ Place of Birth: _________________

Date Consent Forms Signed: ____

Probation Status at That Time: ____

Address and Telephone Number:

Mother's Name and Address (if different):

Father's Name and Address (if different):

Other relative/close friend:

Probation officer (if applicable):

CAS Worker (if applicable):

CLINICAL TRIALS OF MULTISYSTEMIC THERAPY: FORM D

Case Close-Out Information

Therapist: ______________________________ Case Identifier #: [_____][____][____][____][____]

Date Started: ___________________________ Date Closed: ______________________________

Number of Sessions: _______ In retrospect, was this an appropriate referral to MST? No Yes

Reason this case is being closed (e.g., attainment of overarching goal(s); youth sentenced to custody; youth/family left jurisdiction; consent withdrawn; etc.):

Target Behaviour(s):

Overarching Goal(s):

Which overarching goals were achieved?

Did you enjoy working with this family?

Never	Sometimes	Usually	Mostly	Always
0	1	2	3	4

As a therapist, how confident are you that you applied the 9 principles in this case?

Not at all	Some	Half Way	Mostly	Completely
0	1	2	3	4

In your opinion, what is the likelihood this youth will be convicted for a criminal offence at sometime during the next three years?

None	Possibly	50-/50	Probably	Certain
0	1	2	3	4

...the likelihood he/she will be convicted of at least one criminal offence over the next two years?

None	Possibly	50-/50	Probably	Certain
0	1	2	3	4

...the likelihood he/she will be convicted of at least one criminal offence within the next year?

None	Possibly	50-/50	Probably	Certain
0	1	2	3	4

[agency letterheadRS]

CLINICAL TRIALS OF MULTISYSTEMIC THERAPY TARGETING HIGH-RISK YOUNG OFFENDERS

LETTER OF INFORMATION

We are asking you to help us with a research study. When youths are involved with the criminal justice system, it can be very stressful for the whole family. This is one of four communities in Ontario that is trying out a new type of intervention for young people and their families. It is called multisystemic therapy (MST) and it was developed in the United States. *We want to find out if MST will help us to help young people stay out of trouble with the law.* To do this, we need *your* help. We will compare a group of youths who receive MST with a group of youths who do not. Down the road, after one, two and three years, someone from the London Family Court Clinic will check to see if the two groups are different in terms of criminal offending.

Your son or daughter has been identified as a person who might benefit from MST. MST is a short-term intervention (three to six months) that involves the whole family. It is a home-based, family-based treatment that uses family strengths to improve family relations, peer relations, and school performance. The MST therapist meets with the family to jointly plan strategies for improving problems identified by family members. Therapy sessions are usually provided in the family home several times a week. There is no cost to the family. The youth does not need to consent to the MST intervention, but the parent(s) must be in agreement and both a parent and the youth must sign the consent forms.

How will MST be evaluated? It will be compared to the services already available in our community, perhaps probation supervision or counselling at a community agency. This opportunity has been provided by funding from Ontario's Ministry of Community and Social Services and the Department of Justice in Ottawa. Half of the participants in the study will receive the services currently available in this community (which may involve being on a waiting list for a while) and half will receive MST. Who goes where will be determined randomly, much like flipping a coin, so everyone has an equal chance.

If you agree to participate, you will be asked to sign several forms and complete several questionnaires. The forms are used to indicate that you consent to participation in the study and that you agree the research team can access your son/daughter's criminal record at three points in the future. The questionnaires help us learn more about your family and what you see as your

strengths and challenges. When all this has been done, you can open the envelope attached to this form. Half of the envelopes contain pieces of paper which say "MST." Half of the envelopes contain pieces of paper which say "CURRENT SERVICES." No one knows what is in your envelope. Whichever group you are in, we will ask you to do the questionnaires again, about five months from now.

There are a few things for you to know before you decide whether or not to participate in this MST study. When agencies like ours do studies, there are lots of rules that we have to follow to make sure that people who help us are treated well and not harmed in any way. Here are those rules. First, you should know that you do not have to agree to participate if you do not want to. In other words, this is **voluntary**. If you DO NOT agree to participate, your son or daughter will still have access to the services available in this community, except MST. If you DO agree to participate, you can change your mind and withdraw your consent at any time.

Second, you should know that all the information you give is **confidential**. Your case records are stored in a secure area and will not be shown to anyone outside the MST team without your signed consent. Any thing you say will not be told to anyone outside the MST team (which includes the MST consultant at the Medical University of South Carolina) or the research team, except in three circumstances. We would have to alert the police if we were told that someone is sincerely planning to seriously harm a specific individual. We would also have to tell the authorities if we were to learn that a person under the age of 16 is currently at risk of harm. According to the law, any citizen of Ontario has to report that information to the Children's Aid Society. Finally, if a member of your family is a complainant in a criminal trial and a judge so demands, we may have to give the case file to the judge who will decide if any of the information is relevant to the trial. In sum, all information is confidential except under three circumstances:

1. a person is sincerely planning to seriously harm a specific person

2. a child is at risk of harm

3. a court subpoenas the case records

The third thing you should know is that a report will be written about the results of the study. In that report, the results will be presented in such a way that no one can identify your family or know that you participated. In other words, we can guarantee that information about you will be **anonymous** because we talk about groups not individuals. We do this mainly by using percentages. For example, we might say that 45 percent of the people in the study held a certain opinion. The reports are available on the internet at www.lfcc.on.ca

Finally, there are no physical or psychological **risks** associated with your participation in the MST study. And what we learn in this study may be used to help other youths and their families. Dr. Alan Leschied, Ph.D., C.Psych., as Principal Investigator, will be available if you have any questions or concerns. You can contact him at:

Division of Educational Psychology
Faculty of Education
University of Western Ontario
(519) 661-2088, ext. 8628
e-mail: leschied@uwo.ca

Or you can leave a voice-mail message at (519) 679-7250, ext. 120, and he will call you back so you do not have to incur long distance charges. Or you can call the local MST clinical supervisor:

[add name & contact information]

If you have read this information and are willing to be involved with the study, please sign the attached consent forms. Please keep this letter.