

Telephone Care in Rural Smokers with Substance Dependence

Appendix 1: Study Questionnaires

1. Case ID #: _____ 2. Today's Date: __ __Month __ __Day __ __ __ __Year

3. Interviewer: _____

Screening Questionnaire

Admission Date: __ __/ __ __/ __ __ __ __

What is your current age? __ __ years (must be at least 19 years of age)

Do you smoke daily? 1 = YES 0 = NO (**NOT ELIGIBLE**)

Zip Code (prior to admission): __ __ __ __ __ __
Rural: __ __ 1=YES __ __ 0=NO (**NOT ELIGIBLE**)

Have you ever entered a substance use treatment program before? 1=YES 0=NO
If yes, what is the date of admission of the LAST treatment program? __ __/ __ __/ __ __ __ __
(If less than 30 days prior to current admission date, **NOT ELIGIBLE**)

When was the last date you used any drug before entering treatment? (if greater than 30 days prior to treatment entry, **NOT ELIGIBLE**)

__ __/ __ __/ __ __ __ __

Will you have access to a telephone after leaving treatment? 1=YES 0=NO or UNKNOWN (**NOT ELIGIBLE**)

Structured Clinical Interview DSM-IV (SCID) SUD Section

Interviewer: Ask subject if he/she has used any of the below types of drugs in the past 12 months, more than once to get high, feel better, or change mood. For each drug/alcohol used in the past 12 months, ask dependence criteria. If does not meet dependence for any drug/alcohol NOT ELIGIBLE for study. Record last use date for each drug/alcohol used in past 12 months. CODE 0=NO; 1=YES

Stimulants: Speed, Rush, Ritalin, Diet Pills, Cocaine/Crack.

Methamphetamines/Amphetamines

Alcohol

Opiates/Narcotics: Heroin, Morphine, Dilaudid, Opium, Demerol, Methadone, Codeine, Oxycontin, Percodan, Darvon, Vicodin, hydrocodone, oxycodone

Hallucinogens: LSD, Mescaline, Peyote, PCP, Psilocybin, STP, Mushrooms, Ecstasy, MDA, MDMA.

Inhalants: glue, ethyl chloride, nitrous oxide, Amyl or butyl nitrate.

Marijuana/Hashish

Tranquillizers: qualude, seconal, valium, xanax, Librium, activan, dalmene, halcion, barbiturates, miltown.

Miscellaneous: steroids, nonprescription sleep or diet pills.

Nicotine

INTERVIEWER: List Substances to be explored in table:

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DEPENDENCE CRITERIA (3 OR MORE)

CRITERIA	DRUG CATEGORY		
	Alcohol	Cocaine	Meth
Have you often found that when you started drinking/using you ended up drinking/using more than you were planning to: IF NO: What about drinking/using over a much longer period of time than you were planning to?			
Have you tried to cut down or stop drinking/using? IF NO: Did you want to stop or cut down?			
Have you spent a lot of time drinking, being high, or hung-over?			
Have you had times when you would drink/use so often that you started to drink/use instead of working, spending time with family/friends, or engaging in other important activities? Such as sports, gardening?			
Has your drinking/using ever caused any psychological problems (Depressed, hard to sleep, blackouts)/ or physical problems or made a physical problem worse?			
Have you found that you needed to drink/use a lot more in order to get the feeling you wanted than you did when you first started drinking/using? IF NO: What about finding that when you drank/used the same amount, it had much less effect than before?			
Have you ever had any withdrawal symptoms when you cut down or stopped drinking/using such as: Sweating/Racing Heart? Hand Shakes? Trouble Sleeping? Nausea/Vomit? Agitation? Anxiousness? Seizure? Hallucinations?			

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CRITERIA	DRUG CATEGORY		
	Narcotics	Hallucinogens	Inhalants
<p>Have you often found that when you started drinking/using you ended up drinking/using more than you were planning to: IF NO: What about drinking/using over a much longer period of time than you were planning to?</p>			
<p>80. Have you tried to cut down or stop drinking/using? IF NO: Did you want to stop or cut down?</p>			
<p>Have you spent a lot of time drinking, being high, or hung-over?</p>			
<p>Have you had times when you would drink/use so often that you started to drink/use instead of working, spending time with family/friends, or engaging in other important activities? Such as sports, gardening?</p>			
<p>Has your drinking/using ever caused any psychological problems (Depressed, hard to sleep, blackouts)/ or physical problems or made a physical problem worse?</p>			
<p>Have you found that you needed to drink/use a lot more in order to get the feeling you wanted than you did when you first started drinking/using? IF NO: What about finding that when you drank/used the same amount, it had much less effect than before?</p>			
<p>Have you ever had any withdrawal symptoms when you cut down or stopped drinking/using such as:</p> <p>Sweating/Racing Heart? Hand Shakes? Trouble Sleeping? Nausea/Vomit? Agitation? Anxiousness? Seizure? Hallucinations?</p>			

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DEPENDENCE CRITERIA CONT. (3 OR MORE)

CRITERIA	DRUG CATEGORY		
	Marijuana Last use:	Tranqui- lizers	Nicotine
Have you often found that when you started drinking/using you ended up drinking/using more than you were planning to: IF NO: What about drinking/using over a much longer period of time than you were planning to?			
Have you tried to cut down or stop drinking/using? IF NO: Did you want to stop or cut down?			
Have you spent a lot of time drinking, being high, or hung-over?			
Have you had times when you would drink/use so often that you started to drink/use instead of working, spending time with family/friends, or engaging in other important activities? Such as sports, gardening?			
Has your drinking/using ever caused any psychological problems (Depressed, hard to sleep, blackouts)/ or physical problems or made a physical problem worse?			
Have you found that you needed to drink/use a lot more in order to get the feeling you wanted than you did when you first started drinking/using? IF NO: What about finding that when you drank/used the same amount, it had much less effect than before?			
Have you ever had any withdrawal symptoms when you cut down or stopped drinking/using such as: Sweating/Racing Heart? Hand Shakes? Trouble Sleeping? Nausea/Vomit? Agitation? Anxiousness? Seizure? Hallucinations?			

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Interviewer: Circle Substances that meet DEPENDENCE criteria: (0=No; 1=Yes)

- | | |
|-----------------|------------------|
| 1. Alcohol | 6. Inhalants |
| 2. Stimulant | 7. Cannabis |
| 3. Meth | 8. Tranquillizer |
| 4. Narcotics | 9. Miscellaneous |
| 5. Hallucinogen | 10. Nicotine |

Structured Clinical Interview DSM-IV (SCID) Psychotic and Associated Symptoms Section

PSYCHOTIC AND ASSOCIATED SYMPTOMS

FOR EACH PSYCHOTIC SYMPTOM, DESCRIBE ON THE SCORESHEET THE ACTUAL CONTENT AND INDICATE THE PERIOD OF TIME DURING WHICH THE SYMPTOM WAS PRESENT.

Now I am going to ask you about unusual experiences that people sometimes have.

DELUSIONS

B1 Has it ever seemed like people were talking about you or taking special notice of you?

1=Yes 0=No 88=N/A

B2 What about anyone going out of his or her way to give you a hard time or trying to hurt you?

1=Yes 0=No 88=N/A

B3 Did you ever feel that you were especially important in some way, or that you had special powers to do things that other people couldn't do?

1=Yes 0=No 88=N/A

B4 Did you ever feel that something was very wrong with you physically even though your doctor said nothing was wrong...like you had cancer or some other terrible disease?

1=Yes 0=No 88=N/A

B5 Did you ever have any unusual religious experiences?

1=Yes 0=No 88=N/A

5a. Did you ever feel that you had committed a crime or done something terrible for which you should be punished?

1=Yes 0=No 88=N/A

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5b. Did you ever believe that someone or something outside yourself was controlling your thoughts or actions against your will?

1=Yes 0=No 88=N/A

5c. Did you ever believe that someone could read your mind? 1=Yes 0=No 88=N/A

5d. Did you ever feel that certain thoughts that were not your own were put into your head?

1=Yes 0=No 88=N/A

5e. What about taken out of your head? 1=Yes 0=No 88=N/A

HALLUCINATIONS

B6 Did you hear things that other people couldn't hear, such as noises, or the voices of people whispering or talking?

1=Yes 0=No

IF YES: What did you hear? _____

How often did you hear it? _____

B7 Did you ever have visions or see things that other people couldn't see?

1=Yes 0=No

7a. Were you awake at the time? 1=Yes 0=No 88=N/A

B8 What about strange sensations in your body or on your skin? 1= Yes 0=No

B9 What about smelling or tasting things that other people couldn't smell or taste?

1=Yes 0=No

THE REMAINDER OF THE ITEMS IN THIS SECTION ARE OBSERVATIONAL OR BY HISTORY

Let me stop for a minute while I make a few notes.

Observe for:

B10 Catatonic behaviors; e.g., catalepsy, stupor, catatonic agitation, negativism, mutism, posturing, stereotyped movements, echolalia, echopraxia.

1=Yes 0=No

B11 Grossly disorganized behavior; e.g., markedly disheveled appearance, grossly inappropriate, sexual behavior, unpredictable or untriggered agitation.

1=Yes 0=No

B12 Grossly inappropriate affect, e.g., smiling while discussing being persecuted.

1=Yes 0=No

B13 Disorganized speech; e.g., frequent derailment (loosening of association) or incoherence.

1=Yes 0=No

B14 Negative symptoms; i.e., affective flattening, alogia, avolition.

1=Yes 0=No

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7. Patient is eligible?

____ 0=NO
____ 1=YES

8. Do you agree to be in this study?

____ 0=NO
____ 1=YES

9. Patient has signed informed consent form?

____ 0=NO
____ 1=YES

10. If participant is eligible and agrees to study, enter scheduled date for baseline assessment:

___/___/___

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1. Study ID #: _____

2. Today's Date: __ __ / __ __ / _____

3. Interviewer: _____

Treatment Admission Date: __ __ / __ __ / _____

Baseline Questionnaire

Subject Contact Information

Address: _____

Zip Code: _____ - _____

Phone#1: _____

Phone#2: _____

Email: _____

Locater #1 Contact Information

Name: _____

Address: _____

Phone#1: _____

Phone#2: _____

Relation to Subject: _____

1=parent 2=sibling 3=friend 4=significant other

Locater #2 Contact Information

Name: _____

Address: _____

Phone#1: _____

Phone#2: _____

Relation to Subject: _____

Interviewer: Ask the subject to please tell their locaters about their participation in this research study. Have subject sign letter to send to locaters.

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How many cigarettes have you smoked in the last 30 days?

- 1 = none 5 = 20-39
2 = 1 or 2 6 = 40-99
3 = 3-9 7 = 100 or more
4 = 10-19

Have you ever tried to quit? 0 = No 1 = Yes

a. If yes, how many times? _____

b. When was your last quit attempt?

- | | |
|-------------------------------|--------------------------|
| 0. I have never tried to quit | 5. 1.5-2 years ago |
| 1. 30-60 days ago | 6. 2-3 years ago |
| 2. 2-6 months ago | 7. 3-5 years ago |
| 3. 6-12 months ago | 8. More than 5 years ago |
| 4. 12-18 months ago | |

c. What is the longest amount of time you were able to abstain from smoking?

- | | |
|------------------------|------------------------|
| 0 = Less than 24 hours | 4 = 2 weeks- 2 months |
| 1 = 24 to 48 hours | 5 = 2 to 6 months |
| 2 = 2 to 4 days | 6 = 6 months to a year |
| 3 = 4 days-2 weeks | 7 = more than a year |

What was the date that you quit smoking? _____

How many times since entering this study have you been able to quit for at least 24 hours? _____

For the next set of questions please consider the past 6 weeks.

If you are currently smoking, how many cigarettes are you smoking per day? _____

How many days per week are you smoking? _____

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FTND

1. How soon after you wake up do you smoke your first cigarette?

0 = Within 5 min

1 = 6-30 min

2 = 31-60

3 = After 60

2. Do you find it difficult to refrain from smoking in places where it is forbidden?

0 = No

1 = Yes

3. Which cigarette would you hate most to give up?

1 = The first one in the morning

2 = All others

4. How many cigarettes/day do you smoke?

0 = 10 or less

1 = 11-20

2 = 21-30

3 = 31 or more

5. Do you smoke more frequently during the first hours after waking than during the rest of the day?

0 = No

1 = Yes

6. Do you smoke if you are so ill that you are in bed most of the day?

0 = No

1 = Yes

Timeline Follow back Calendar (Ask about all drugs/alcohol used in past 30 days, see above list)

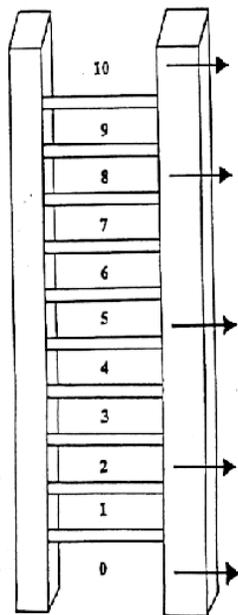
START DATE: ___/___/___

TODAY'S DATE: ___/___/___

	SUN	MON	TUES	WED	THURS	FRI	SAT
MONTH							

Readiness to Quit

Each rung on this ladder represents where various cigarette smokers are in their thinking about quitting. Please circle the number that indicates where you are right now.



10 → Taking action to quit.
 (e.g., cutting down, enrolling in a program)

8 → Starting to think about how to change my smoking patterns.

5 → Thinking I should quit but not quite ready.

2 → Think I need to consider quitting someday.

0 → No thoughts of quitting

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QSU

Please answer how much you agree or disagree with the following statements.

	Strongly Disagree							Strongly Agree
	1	2	3	4	5	6	7	
I have no desire for a cigarette right now.								
Nothing would be better than smoking a cigarette right now.	1	2	3	4	5	6	7	
If it were possible I probably would smoke now.	1	2	3	4	5	6	7	
I could control things better right now if I could smoke.	1	2	3	4	5	6	7	
All I want right now is a cigarette.		1	2	3	4	5	6	7
I have an urge for a cigarette.		1	2	3	4	5	6	7
A cigarette would taste good now.		1	2	3	4	5	6	7
I would do almost anything for a cigarette now.	1	2	3	4	5	6	7	
Smoking would make me less depressed.		1	2	3	4	5	6	7
I am going to smoke as soon as possible.		1	2	3	4	5	6	7

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SSEQ

The following are some situation in which certain people might be tempted to smoke. Please indicate how sure you are that you could refrain from smoking in each situation.

	Not at all sure	Not very sure	More or less sure	Fairly sure	Absolutely sure	Unknown
When I feel nervous	1	2	3	4	5	9
When I feel depressed	1	2	3	4	5	9
When I am angry	1	2	3	4	5	9
When I feel very anxious	1	2	3	4	5	9
When I want to think about a difficult situation	1	2	3	4	5	9
When I feel the urge to smoke	1	2	3	4	5	9

The following are some situation in which certain people might be tempted to smoke. Please indicate how much you are tempted to smoke in each situation.

	Not at all tempted	Not very tempted	Somewhat tempted	Very tempted	Extremely tempted	Unknown
When having a drink with friends	1	2	3	4	5	9
When celebrating something	1	2	3	4	5	9
When drinking beer, wine, or other spirits	1	2	3	4	5	9
When I am with smokers	1	2	3	4	5	9
After a meal	1	2	3	4	5	9
When having coffee or tea	1	2	3	4	5	9

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TREATMENT SERVICES

How many days did you live at the residential treatment center?

__ __ DAYS

How many miles do you live from the nearest outpatient substance abuse treatment center?

__ __ __ MILES
__ 1=DK

Are you in a ½ way house or ¾ house?

__ 0=NO
__ 1=YES

Have you been readmitted to a residential treatment program?

__ 0=NO
__ 1=YES

Have you attended any outpatient substance abuse treatment sessions since you left residential treatment/since our last follow-up (1X1 sessions and group)?

__ 0=NO
__ 1=YES

If NO to above, what was the date of the last outpatient substance abuse treatment session you attended since you left residential treatment/since our last follow-up (1X1 sessions and group)?

__ __ / __ __ / __ __ __ __ (code N/A=11/11/20)

__ I have never attended any outpatient substance abuse treatment sessions since leaving treatment. (code 1=Yes or 88=NA)

a. If never attended, why have you never attended any outpatient substance abuse treatment sessions?

- __ 1=My counselor did not recommend it
- __ 2=I did not think it would help me stay sober from alcohol/drugs
- __ 3=I did not have time
- __ 4=I did not attend because of Work
- __ 5=I did not attend because of Transportation
- __ 6=I did not attend because of Fear someone would find out
- __ 7=I did not attend because of Cost
- __ 8=I did not attend for another reason not listed above (Specify: _____)

If Yes, How many outpatient sessions (Group and Individual) have you attended each week since you left residential treatment/since our last follow-up? (delivered by a counselor or SUD specialist)

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___ Total Number of Sessions
 ___ Individual Counseling
 ___ Group Sessions
 ___ 88=N/A

Interviewer: If participant is attending Outpatient sessions, record weekly attendance below (I=Individual/G=Group) Enter an I and/or G on each day participant attended an outpatient session.

Start Date: ___/___/____ **Today's Date:** ___/___/____

SUN	MON	TUES	WED	THURS	FRI	SAT

How many miles do you live from the nearest psychiatrist?

___ MILES
 ___ 1=DK

Have you seen a psychiatrist since you left residential treatment/since our last follow-up?

___ 0=NO (**Go to #70**)
 ___ 1=YES (**Go to # 69**)

If NO to above, what was the date of the last visit you had with a psychiatrist since you left residential treatment/since our last follow-up?

___/___/____ (code N/A=11/11/20)

___ I have never attended any sessions with a psychiatrist. (code 1=Yes or 88=NA)

a. If never attended, why have you never attended any outpatient substance abuse treatment sessions?

- ___ 1=My counselor did not recommend it
- ___ 2=I did not think it would help me stay sober from alcohol/drugs
- ___ 3=I did not have time
- ___ 4=I did not attend because of Work
- ___ 5=I did not attend because of Transportation
- ___ 6=I did not attend because of Fear someone would find out
- ___ 7=I did not attend because of Cost
- ___ 8=I did not attend for another reason not listed above (Specify: _____)

If yes, how many times have you seen a psychiatrist since you left residential treatment/since our last follow-up?

___ Total VISITS to Psychiatrist

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__ __88=N/A

Interviewer: If participant is seeing a psychiatrist, record weekly attendance below (P=Psychiatrist) Enter a "P" on each day participant attended saw a psychiatrist.

Start Date: __/__/____ Today's Date: __/__/____

SUN	MON	TUES	WED	THURS	FRI	SAT

Are there 12 Step meetings (AA/NA/CA/CMA) offered in your community?

- __ 0=NO
- __ 1=YES
- __ 2=DK

How many miles do you live from the nearest 12-Step meeting (AA/NA/CA/CMA) site?

- __ __ MILES
- __ 1=DK

Have you attended any 12-Step meetings since you left residential treatment/since our last follow-up?

- __ 0=NO (Go to #)
- __ 1=YES (Go to #72)

If NO to above, what was the date of the last 12-Step meeting you attended since you left residential treatment/since our last follow-up?

__/__/____ (code N/A=11/11/20)

__ I have never attended a 12-Step meeting since leaving residential treatment/since our last follow-up. (code 1=Yes or 88=NA)

a. If never attended, why have you never attended a 12-Step meeting since you left residential treatment/since our last follow-up?

- __ 1=My at counselor at St. Francis did not recommend it
- __ 2=I did not think it would help me stay sober from alcohol/drugs
- __ 3=I did not have time
- __ 4=I did not attend because of Work
- __ 5=I did not attend because of Transportation
- __ 6=I did not attend because of Fear someone would find out
- __ 7=I did not attend because of Cost

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___8=I did not attend for another reason not listed above (Specify: _____)

If Yes, How many 12-Step meetings have you attended each week since you left residential treatment /since our last follow-up?

___ MEETINGS

___88=N/A

Interviewer: If participant is seeing a psychiatrist, record weekly attendance below (P=Psychiatrist) Enter a "P" on each day participant attended saw a psychiatrist.

Start Date: ___/___/____ Today's Date: ___/___/____

SUN	MON	TUES	WED	THURS	FRI	SAT

Have you spoken with someone other than a professional about your substance abuse problem?

___0=NO (Go to #75)

___1=YES (Go to #74)

If yes, to whom have you spoken about your substance abuse problem?

___1=Close friend

___2=Clergy

___3=Co-worker

___4=Family member

___5=Sponsor

___6=Member of AA/NA/CA/CMA

___7=Other (Specify: _____)

How many times have you spoken to the above person about your substance abuse problem?

___ TIMES

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Appendix 1: Study Questionnaires

The Alcoholics Anonymous Affiliation Scale (AAAS)

Interviewer: I would like to ask you some questions about Alcoholics Anonymous (AA) and other 12-step support groups. This will include Narcotics Anonymous (NA), Cocaine Anonymous (CA) and Crystal Meth Anonymous (CMA) as well as Alcoholics Anonymous.

How many AA/NA/CA/CMA meetings would you estimate that you've gone to during your lifetime?

- 0=None
- 1=Less than 30
- 2=Between 30 and 90
- 3=Over 90 but less than 500
- 4=Over 500

How many AA/NA/CA/CMA meetings have you gone to in the last 12 months?

Meetings

Have you ever considered yourself a member of AA/NA/CA/CMA?

- 0=NO
- 1=YES

Have you ever called an AA/NA/CA/CMA member for help?

- 0=NO
- 1=YES

Do you now have an AA/NA/CA/CMA sponsor?

- 0=NO
- 1=YES

Have you ever sponsored anyone in AA/NA/CA/CMA?

- 0=NO
- 1=YES

Have you had a spiritual awakening or a conversion experience as a result of your involvement in AA/NA/CA/CMA?

- 0=NO
- 1=YES

In the past 12 months, have you read AA/NA/CA/CMA literature?

- 0=NO
- 1=YES

In the past 12 months, have you done service, helped newcomers, or set up chairs, made coffee, cleaned up after a meeting etc.? (end AAAS)

- 0=NO
- 1=YES

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Have you used any of these drugs even once in the past 30 days? If yes, how many days?

Alcohol	1=YES	0=NO	_____
Stimulants (Speed, Rush, Ritalin, Diet Pills, Cocaine/Crack.)	1=YES	0=NO	_____
Methamphetamines/Amphetamines	1=YES	0=NO	_____
Narcotics	1=YES	0=NO	_____
(Heroin, Morphine, Dilaudid, Opium, Demerol, Methadone, Codeine, Oxycontin, Percodan, Darvon.)			
Hallucinogens	1=YES	0=NO	_____
(LSD, Mescaline, Peyote, PCP, Psilocybin, STP, Mushrooms, Ecstasy, MDA, MDMA.)			
Inhalants	1=YES	0=NO	_____
(glue, ethyl chloride, nitrous oxide, Amyl or butyl nitrate.)			
Marijuana/Hashish	1=YES	0=NO	_____
Tranquillizers	1=YES	0=NO	_____
(quaalude, seconal, valium, xanax, Librium, ativan, dalmane, halcion, barbiturates, miltown.)			
Miscellaneous	1=YES	0=NO	_____
(steroids, nonprescription sleep or diet pills. Any others?)			
Nicotine (cigarettes, spit tobacco, snuff)	1=YES	0=NO	_____

INTERVIEWER, list substances used in the past 30 days for TLFB Calendar

Timeline Follow back Calendar (Ask about all drugs/alcohol used in past 30 days, see above list)

START DATE: __ __/ __ __/ __ __ __ __

TODAY'S DATE: __ __/ __ __/ __ __ __ __

TIMELINE FOLLOWBACK CALENDAR: INTERVIEWER FILL IN THE APPROPRIATE DATES USING THE CALENDAR

	SUN	MON	TUES	WED	THURS	FRI	SAT
MONTH							

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1. Study ID #: _____

2. Today's Date: _____

3. Interviewer: _____

4. Follow-Up: 6-week 12-week

5. Completed: 1= Phone 2=In Person

Follow-Up Questionnaire

Has your contact information changed since you left treatment?

0 = No 1 = Yes

If yes, what is your new address: _____

Phone number: _____

What is the zip code you have lived in most of the last 6 weeks?

_____ - _____

What is the zip code where you live now?

_____ - _____

Do you have a valid driver's license?

___ 0=NO

___ 1=YES

Do you have an automobile available for use? (Answer NO, if no valid driver's license)

___ 0=NO (**Go to #19**)

___ 1=YES (**Go to #20**)

If no, how do you get around?

___ 1=Bus or other public transportation

___ 2=Taxi

___ 3=Friend or Relative drives you

___ 4=Bicycle or walk

___ 5=Drive someone else's vehicle

___ 88=N/A

Usual or last occupation?(E7 ASI; Use Hollingshead list when transferring to ASI section)

Specify: _____

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How many cigarettes have you smoked in the last 30 days?

- 1 = none 5 = 20-39
2 = 1 or 2 6 = 40-99
3 = 3-9 7 = 100 or more
4 = 10-19

Have you ever tried to quit? 0 = No 1 = Yes

a. If yes, how many times? _____

b. When was your last quit attempt?

- | | |
|--------------------------------------|---------------------------------|
| 0. I have never tried to quit | 5. 1.5-2 years ago |
| 1. 30-60 days ago | 6. 2-3 years ago |
| 2. 2-6 months ago | 7. 3-5 years ago |
| 3. 6-12 months ago | 8. More than 5 years ago |
| 4. 12-18 months ago | |

c. What is the longest amount of time you were able to abstain from smoking?

- | | |
|-------------------------------|-------------------------------|
| 0 = Less than 24 hours | 4 = 2 weeks- 2 months |
| 1 = 24 to 48 hours | 5 = 2 to 6 months |
| 2 = 2 to 4 days | 6 = 6 months to a year |
| 3 = 4 days-2 weeks | 7 = more than a year |

What was the date that you quit smoking? _____

How many times since entering this study have you been able to quit for at least 24 hours? _____

For the next set of questions please consider the past 6 weeks.

If you are currently smoking, how many cigarettes are you smoking per day? _____

How many days per week are you smoking? _____

Telephone Care in Rural Smokers with Substance Dependence
Appendix 1: Study Questionnaires

FTND

1. How soon after you wake up do you smoke your first cigarette?

0 = Within 5 min

1 = 6-30 min

2 = 31-60

3 = After 60

2. Do you find it difficult to refrain from smoking in places where it is forbidden?

0 = No

1 = Yes

3. Which cigarette would you hate most to give up?

1 = The first one in the morning

2 = All others

4. How many cigarettes/day do you smoke?

0 = 10 or less

1 = 11-20

2 = 21-30

3 = 31 or more

5. Do you smoke more frequently during the first hours after waking than during the rest of the day?

0 = No

1 = Yes

6. Do you smoke if you are so ill that you are in bed most of the day?

0 = No

Telephone Care in Rural Smokers with Substance Dependence
 Appendix 1: Study Questionnaires

1 = Yes

Timeline Follow back Calendar (Ask about all drugs/alcohol used in past 30 days, see above list)

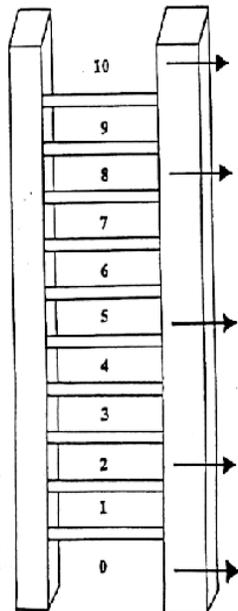
START DATE: ___/___/_____

TODAY'S DATE: ___/___/_____

	SUN	MON	TUES	WED	THURS	FRI	SAT
MONTH							

Readiness to Quit

Each rung on this ladder represents where various cigarette smokers are in their thinking about quitting. Please circle the number that indicates where you are right now.



10
 Taking action to quit.
 (e.g., cutting down, enrolling in a program)

9
 8
 7
 6
 5
 4
 3
 2
 1
 0
 Starting to think about how to change my smoking patterns.

Thinking I should quit but not quite ready.

Think I need to consider quitting someday.

No thoughts of quitting

QSU

Please answer how much you agree or disagree with the following statements.

Telephone Care in Rural Smokers with Substance Dependence

Appendix 1: Study Questionnaires

	Strongly Disagree							Strongly Agree
	1	2	3	4	5	6	7	
I have no desire for a cigarette right now.								
Nothing would be better than smoking a cigarette right now.	1	2	3	4	5	6	7	
If it were possible I probably would smoke now.	1	2	3	4	5	6	7	
I could control things better right now if I could smoke.	1	2	3	4	5	6	7	
All I want right now is a cigarette.		1	2	3	4	5	6	7
I have an urge for a cigarette.		1	2	3	4	5	6	7
A cigarette would taste good now.		1	2	3	4	5	6	7
I would do almost anything for a cigarette now.	1	2	3	4	5	6	7	
Smoking would make me less depressed.		1	2	3	4	5	6	7
I am going to smoke as soon as possible.		1	2	3	4	5	6	7

Telephone Care in Rural Smokers with Substance Dependence

Appendix 1: Study Questionnaires

SSEQ

The following are some situation in which certain people might be tempted to smoke. Please indicate how sure you are that you could refrain from smoking in each situation.

	Not at all sure	Not very sure	More or less sure	Fairly sure	Absolutely sure	Unknown
When I feel nervous	1	2	3	4	5	9
When I feel depressed	1	2	3	4	5	9
When I am angry	1	2	3	4	5	9
When I feel very anxious	1	2	3	4	5	9
When I want to think about a difficult situation	1	2	3	4	5	9
When I feel the urge to smoke	1	2	3	4	5	9

The following are some situation in which certain people might be tempted to smoke. Please indicate how much you are tempted to smoke in each situation.

	Not at all tempted	Not very tempted	Somewhat tempted	Very tempted	Extremely tempted	Unknown
When having a drink with friends	1	2	3	4	5	9
When celebrating something	1	2	3	4	5	9
When drinking beer, wine, or other spirits	1	2	3	4	5	9
When I am with smokers	1	2	3	4	5	9
After a meal	1	2	3	4	5	9
When having coffee or tea	1	2	3	4	5	9

Telephone Care in Rural Smokers with Substance Dependence

Appendix 1: Study Questionnaires

TREATMENT SERVICES

How many days did you live at the residential treatment center?

___ DAYS

How many miles do you live from the nearest outpatient substance abuse treatment center?

___ MILES ___1=DK

Are you in a ½ way house or ¾ house?

___0=NO

___1=YES

Have you been readmitted to a residential treatment program?

___0=NO

___1=YES

Have you attended any outpatient substance abuse treatment sessions since you left residential treatment/since our last follow-up (1X1 sessions and group)?

___0=NO

___1=YES

If NO to above, what was the date of the last outpatient substance abuse treatment session you attended since you left residential treatment/since our last follow-up (1X1 sessions and group)?

___/___/___ (code N/A=11/11/20)

___ I have never attended any outpatient substance abuse treatment sessions since leaving treatment. (code 1=Yes or 88=NA)

a. If never attended, why have you never attended any outpatient substance abuse treatment sessions?

___1=My counselor did not recommend it

___2=I did not think it would help me stay sober from alcohol/drugs

___3=I did not have time

___4=I did not attend because of Work

___5=I did not attend because of Transportation

___6=I did not attend because of Fear someone would find out

___7=I did not attend because of Cost

___8=I did not attend for another reason not listed above (Specify: _____)

If Yes, How many outpatient sessions (Group and Individual) have you attended each week since you left residential treatment/since our last follow-up? (delivered by a counselor or SUD specialist)

___ Total Number of Sessions

___ Individual Counseling

___ Group Sessions

___88=N/A

Telephone Care in Rural Smokers with Substance Dependence
 Appendix 1: Study Questionnaires

**Interviewer: If participant is attending Outpatient sessions, record weekly attendance below
 (I=Individual/G=Group) Enter an I and/or G on each day participant attended an outpatient session.**

Start Date: ___/___/____ Today's Date: ___/___/____

SUN	MON	TUES	WED	THURS	FRI	SAT

How many miles do you live from the nearest psychiatrist?

___ MILES
 ___1=DK

Have you seen a psychiatrist since you left residential treatment/since our last follow-up?

___0=NO (Go to #70)
 ___1=YES (Go to # 69)

If NO to above, what was the date of the last visit you had with a psychiatrist since you left residential treatment/since our last follow-up?

___/___/____ (code N/A=11/11/20)

___ I have never attended any sessions with a psychiatrist. (code 1=Yes or 88=NA)

a. If never attended, why have you never attended any outpatient substance abuse treatment sessions?

- ___1=My counselor did not recommend it
- ___2=I did not think it would help me stay sober from alcohol/drugs
- ___3=I did not have time
- ___4=I did not attend because of Work
- ___5=I did not attend because of Transportation
- ___6=I did not attend because of Fear someone would find out
- ___7=I did not attend because of Cost
- ___8=I did not attend for another reason not listed above (Specify: _____)

If yes, how many times have you seen a psychiatrist since you left residential treatment/since our last follow-up?

___ Total VISITS to Psychiatrist
 ___88=N/A

Telephone Care in Rural Smokers with Substance Dependence

Appendix 1: Study Questionnaires

Interviewer: If participant is seeing a psychiatrist, record weekly attendance below (P=Psychiatrist) Enter a "P" on each day participant attended saw a psychiatrist.

Start Date: ___/___/___ Today's Date: ___/___/___

SUN	MON	TUES	WED	THURS	FRI	SAT

Are there 12 Step meetings (AA/NA/CA/CMA) offered in your community?

- ___ 0=NO
- ___ 1=YES
- ___ 2=DK

How many miles do you live from the nearest 12-Step meeting (AA/NA/CA/CMA) site?

- ___ MILES
- ___ 1=DK

Have you attended any 12-Step meetings since you left residential treatment/since our last follow-up?

- ___ 0=NO (Go to #)
- ___ 1=YES (Go to #72)

If NO to above, what was the date of the last 12-Step meeting you attended since you left residential treatment/since our last follow-up?

___/___/___ (code N/A=11/11/20)

___ I have never attended a 12-Step meeting since leaving residential treatment/since our last follow-up. (code 1=Yes or 88=NA)

a. If never attended, why have you never attended a 12-Step meeting since you left residential treatment/since our last follow-up?

- ___ 1=My at counselor at St. Francis did not recommend it
- ___ 2=I did not think it would help me stay sober from alcohol/drugs
- ___ 3=I did not have time
- ___ 4=I did not attend because of Work
- ___ 5=I did not attend because of Transportation
- ___ 6=I did not attend because of Fear someone would find out
- ___ 7=I did not attend because of Cost
- ___ 8=I did not attend for another reason not listed above (Specify: _____)

Telephone Care in Rural Smokers with Substance Dependence

Appendix 1: Study Questionnaires

If Yes, How many 12-Step meetings have you attended each week since you left residential treatment /since our last follow-up?

___ MEETINGS

___88=N/A

Interviewer: If participant is seeing a psychiatrist, record weekly attendance below (P=Psychiatrist) Enter a "P" on each day participant attended saw a psychiatrist.

Start Date: ___/___/____ Today's Date: ___/___/____

SUN	MON	TUES	WED	THURS	FRI	SAT

Have you spoken with someone other than a professional about your substance abuse problem?

___0=NO (Go to #75)

___1=YES (Go to #74)

If yes, to whom have you spoken about your substance abuse problem?

___1=Close friend

___2=Clergy

___3=Co-worker

___4=Family member

___5=Sponsor

___6=Member of AA/NA/CA/CMA

___7=Other (Specify: _____)

How many times have you spoken to the above person about your substance abuse problem?

___ TIMES

Telephone Care in Rural Smokers with Substance Dependence

Appendix 1: Study Questionnaires

The Alcoholics Anonymous Affiliation Scale (AAAS)

Interviewer: I would like to ask you some questions about Alcoholics Anonymous (AA) and other 12-step support groups. This will include Narcotics Anonymous (NA), Cocaine Anonymous (CA) and Crystal Meth Anonymous (CMA) as well as Alcoholics Anonymous.

How many AA/NA/CA/CMA meetings would you estimate that you've gone to during your lifetime?

- 0=None
- 1=Less than 30
- 2=Between 30 and 90
- 3=Over 90 but less than 500
- 4=Over 500

How many AA/NA/CA/CMA meetings have you gone to in the last 12 months?

Meetings

Have you ever considered yourself a member of AA/NA/CA/CMA?

- 0=NO
- 1=YES

Have you ever called an AA/NA/CA/CMA member for help?

- 0=NO
- 1=YES

Do you now have an AA/NA/CA/CMA sponsor?

- 0=NO
- 1=YES

Have you ever sponsored anyone in AA/NA/CA/CMA?

- 0=NO
- 1=YES

Have you had a spiritual awakening or a conversion experience as a result of your involvement in AA/NA/CA/CMA?

- 0=NO
- 1=YES

In the past 12 months, have you read AA/NA/CA/CMA literature?

- 0=NO
- 1=YES

In the past 12 months, have you done service, helped newcomers, or set up chairs, made coffee, cleaned up after a meeting etc.? (end AAAS)

- 0=NO
- 1=YES

Telephone Care in Rural Smokers with Substance Dependence

Appendix 1: Study Questionnaires

Have you used any of these drugs even once in the past 30 days? If yes, how many days?

Alcohol	1=YES	0=NO	_____
Stimulants (Speed, Rush, Ritalin, Diet Pills, Cocaine/Crack.)	1=YES	0=NO	_____
Methamphetamines/Amphetamines	1=YES	0=NO	_____
Narcotics	1=YES	0=NO	_____
(Heroin, Morphine, Dilaudid, Opium, Demerol, Methadone, Codeine, Oxycontin, Percodan, Darvon.)			
Hallucinogens	1=YES	0=NO	_____
(LSD, Mescaline, Peyote, PCP, Psilocybin, STP, Mushrooms, Ecstasy, MDA, MDMA.)			
Inhalants	1=YES	0=NO	_____
(glue, ethyl chloride, nitrous oxide, Amyl or butyl nitrate.)			
Marijuana/Hashish	1=YES	0=NO	_____
Tranquillizers	1=YES	0=NO	_____
(quaalude, seconal, valium, xanax, Librium, ativan, dalmane, halcion, barbiturates, miltown.)			
Miscellaneous	1=YES	0=NO	_____
(steroids, nonprescription sleep or diet pills. Any others?)			
Nicotine (cigarettes, spit tobacco, snuff)	1=YES	0=NO	_____

INTERVIEWER, list substances used in the past 30 days for TLFB Calendar

Timeline Follow back Calendar (Ask about all drugs/alcohol used in past 30 days, see above list)

START DATE: __ __/ __ __/ __ __ __ __

TODAY'S DATE: __ __/ __ __/ __ __ __ __

TIMELINE FOLLOWBACK CALENDAR: INTERVIEWER FILL IN THE APPROPRIATE DATES USING THE CALENDAR

	SUN	MON	TUES	WED	THURS	FRI	SAT
MONTH							

Telephone Care in Rural Smokers with Substance Dependence
 Appendix 1: Study Questionnaires

CALTOP Patient Satisfaction Survey

Interviewer: Replace “the program” with “continuing care”

Use the below scale for the following questions:

Very Helpful Service 1	Pretty Helpful 2	Somewhat Helpful 3	A little Helpful 4	Not at all Helpful 5	Did not need this service -9
How helpful or satisfactory has the program overall been in providing <u>Medical Service</u> (e.g., make arrangements for medical care)?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Employment Service</u> (e.g., have Employment specialist, provide job training)?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Alcohol Counseling</u> ?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Drug Counseling</u> ?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Criminal Legal Services</u> (e.g., assistance with probationary and other legal services)?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Family Services</u> (e.g., family/marital Counseling)?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Mental Health Services</u> (e.g., treatment of depression, schizophrenia, stress and coping management)?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Parenting Skill/Childcare Services</u> (e.g., childcare, parenting classes)?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>HIV/AIDS Prevention Education and Counseling</u> ?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Services for Physical/Sexual Abuse</u> (e.g., survivors discussion group)?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Traditional Social Services/Case Management Services</u> (e.g., assistance with AFDC housing, disability benefits)?					1 2 3 4 5 -9
How helpful or satisfactory has the program overall been in providing <u>Survival Services</u> (e.g., emergency food or housing, transportation)?					1 2 3 4 5 -9

Telephone Care in Rural Smokers with Substance Dependence

Appendix 1: Study Questionnaires

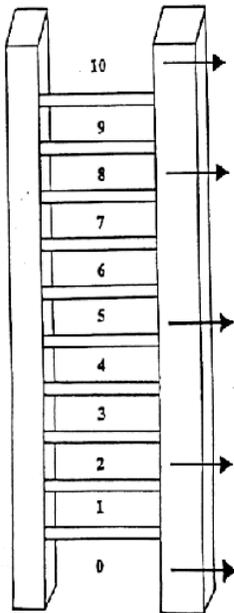
Use the below scale for the following questions:

Very Much	Pretty Much	Some what	A Little	Not at All	
1	2	3	4	5	
How much do you feel your current counselor (or counselor of the treatment program) agrees with you about what would be useful goals for your treatment?	1	2	3	4	5
How much does (did) your counselor show a sincere desire to understand you and your problems?	1	2	3	4	5
How much do you feel that you are (were) working together with your counselor that the two of you are (were) joined in a struggle to overcome your problems?	1	2	3	4	5
How satisfied do you feel with treatment so far (How satisfied were you with treatment?)	1	2	3	4	5
How much has (did) the treatment you have received in the program so far matched with your ideas about what helps people in treatment?	1	2	3	4	5

Research Counselor Smoking Education

Readiness to Quit

Each rung on this ladder represents where various cigarette smokers are in their thinking about quitting. Please circle the number that indicates where you are right now.



10 → Taking action to quit.
(e.g., cutting down, enrolling in a program)

8 → Starting to think about how to change my
smoking patterns.

5 → Thinking I should quit but not quite ready.

2 → Think I need to consider quitting someday.

0 → No thoughts of quitting

If you are currently smoking, how many cigarettes are you smoking per day? _____

How many days per week are you smoking? _____

Do you want to quit smoking? _____ 0 = No 1 = Yes

Have you tried to quit since the last meeting? _____ 0 = No 1 = Yes

If yes, what was your quit date? _____

What is the longest amount of time you have gone without a cigarette? _____

If this is the first time the participant has reported a desire to quit smoking (7 or higher on the RQL) remind the participant that they will be referred to the quit line and the quit line will contact them. Additionally confirm a current address and mail the self-help brochure and benefits of quitting information sheet.

If the participant has previously been referred to the quit line, confirm that they have been contacted by the quit line and review benefits of quitting information sheet.

If participant is not interested in quitting and has not been referred to the quit line, review smoking facts.

Telephone continuing care counselor manual (McKay)

Introduction

In the addictions field, there is growing interest in the development and implementation of treatment protocols and systems that address the full continuum of care, from detoxification to extended recovery monitoring (ASAM, 2001; Dennis & Scott, 2007; Dennis, Scott, & Funk, 2003; Humphreys & Tucker, 2002; McKay, 2005; McLellan, Lewis, O'Brien, & Kleber, 2000; Simpson, 2004). These new models have the potential to bring addiction treatment into a new era, in which care will be provided in contemporary client-centered models designed to effectively manage chronic disorders (IOM, 2006; Wagner et al., 2001).

These changes are being driven by a number of factors, including progressive leadership at the state and local level, greater open-mindedness and pragmatism among treatment providers, increasing insistence from all stake holders for better outcomes, and a series of influential publications that have pointed out the similarities between addiction and other chronic disorders and the limitations of the addiction treatment system as currently constituted (McLellan et al., 2000; McLellan et al., 2003). In addition, there is a growing research literature on continuing care that has provided important information on the effectiveness on various interventions and management practices, ranging from more traditional 12-step focused group counseling approaches to flexible extended care models (Dennis & Scott, 2007; McKay, 2005, in press a, in press b).

The term "Continuing Care" has been used to indicate the stage of treatment that follows an initial episode of more intensive care, usually inpatient/residential or intensive outpatient treatment. At one point this phase of care was referred to as "aftercare" but the more common term is now "continuing care," which better conveys the idea that active treatment continues in this phase (McKay, 2005). Continuing care is provided in a variety of formats and modalities, including group counseling, individual therapy, telephone counseling, brief check-ups, and self-help meetings. This manual presents an approach to continuing care that relies primarily on telephone contacts.

Although there is now widespread agreement among clinicians, policy makers, and treatment researchers that continuing care is important, it is not always easy to deliver. One of the major problems has been availability. Insurance reimbursement for continuing care has been limited, and as a result some programs have provided little or no formal continuing care. However, lack of availability is not the whole story. Some clients will not participate in continuing care when it is available and covered by insurance because they do not want to keep coming back to the clinic for further treatment sessions. This can reflect diminished motivation for treatment, but can also be the result of other competing factors, such as the need to attend to work and parenting responsibilities.

All this suggested that there was a need for a flexible, "user friendly" continuing care intervention that could be provided for extended periods if necessary. The challenge was to develop an effective intervention that would be more appealing and less burdensome to clients than standard continuing care, to promote higher participation rates. One possibility was to center the intervention around the

Telephone Care in Rural Smokers with Substance Dependence

Appendix 2: Telephone Care Manual

use of regular, relatively brief telephone contacts, with provisions to “step up” the level of care when a client’s status or symptoms indicate increased risk of relapse (Lavori, Dawson, & Rush, 2000; McKay, 2009; Sobell & Sobell, 2000).

Telephone-based continuing care is appealing to clients for a number of reasons. First, it is more convenient than standard, clinic-based care. Clients do not have to have access to transportation, take time off from work, or arrange for childcare in order to travel to the clinic. Calls can be completed from home or work, as well as from other locations where the client might be at the scheduled time of the session. Second, telephone-based interventions are provided via individual sessions. Conversely most standard continuing care is provided in groups, a modality that many clients do not like. Third, this approach provides support outside of conventional chemical dependency treatment programs. Some clients are concerned about perceived stigma associated with participation in such programs, and wish to receive continuing care in some other setting.

With regard to effectiveness, the telephone is considered to have a viable therapeutic role in the treatment of a number of physical and mental health problems (Roter et al., 1998; Wasson et al., 1992). Various studies have supported its use in the delivery of reactive and proactive counseling interventions, and in the therapeutic monitoring of health status, treatment compliance, and risk behavior. Telephone contact has been a useful component in the monitoring and treatment of depression (Baer et al., 1995; Osgood-Hynes et al., 1998) and obsessive-compulsive disorder (Baer, Brown-Beasley, Sorce, & Henriques, 1993; Greist et al., 1998).

In the addictions, telephone counseling has been used most extensively as a component in smoking cessation programs. A meta-analysis has shown proactive calls made by counselors to study participants have consistently produced better smoking outcomes than control conditions (Lichtenstein, Glasgow, Lando, Ossip-Klein, & Boles, 1996). There have been fewer studies of telephone continuing care in the treatment of alcohol and other drug disorders. In a study with problem drinkers, Connors, Tarbox, and Faillace (1992) reported no differences between group counseling, telephone calls, and a no continuing care control condition on drinking outcome measures, although the sample size in this study was small. Conversely, Foote & Erfurt (1992) reported that extended telephone contacts in an EAP produced better outcomes than standard follow-up care, as indicated by fewer subsequent hospitalizations and lower substance abuse treatment costs. More recently, Horng and Chueh (2004) reported that a three month telephone continuing care intervention produced better alcohol use outcomes than a no continuing care comparison condition.

The telephone-based continuing care protocol presented in this manual was developed over the course of four randomized clinical trials conducted at the University of Pennsylvania. In the initial two studies, which were conducted with clients who had completed 4-week long Intensive Outpatient Programs (IOPs), a 12-week version of the telephone-based continuing care intervention was found to be more effective than “treatment as usual” continuing care in the clinic (12 weeks of group counseling) on most alcohol and drug use outcome measures. The intervention was also more effective than 12 weeks of cognitive-behavioral relapse prevention continuing care on some outcomes (McKay et al., 2004; 2005). In the third study, we extended the intervention out to 18 months and tested it in clients who had completed at least 3 weeks of an IOP. Once again, the intervention produced better alcohol and drug use outcomes than the

comparison conditions—in this case IOP without telephone continuing care, and IOP with telephone calls that provided monitoring and very brief feedback but no counseling (McKay et al., 2009; McKay, in press). In the fourth study, which is currently underway, we are looking at the impact of providing small incentives for completing the telephone continuing care contacts. These studies are described in more detail later in the manual.

Frequently Asked Questions about Telephone Continuing Care

What is the Telephone-Based Continuing Care Program?

This program is designed to provide continuing care for periods of time ranging from 12 weeks up to two years. The majority of the sessions are provided via telephone contacts. However, we have found that some clients actually prefer to come into the clinic for some of their sessions. The program also includes a stepped care component, which can include a return to clinic-based care, at least for brief periods of time. Therefore, some sessions will likely be provided in the clinic or office. The sessions are usually offered on a weekly basis for 8 weeks, and then on a twice per month schedule after that.

Each session is 15-30 minutes in length, and begins with a brief structured assessment of current symptoms and functioning. This assessment generates summary scores for relapse risk and protective factors, which can be used to monitor changes in these areas over time and to structure the rest of the session. These scores also provide guidance on possible increases or decreases in treatment intensity (i.e., “stepped care”). The rest of the session is then focused on developing coping responses to risk factors identified in the assessment or expected over the period before the next session, primarily through the use of techniques from cognitive-behavioral therapy. Motivational interviewing techniques are also used, particularly when the client appears to be losing motivation or becomes less involved with pro-recovery activities.

The stepped care component has been included to better adapt the program to the changing needs of the client over time. When a client’s balance of risk and protective factors shift sufficiently in the wrong direction, more frequent telephone calls are first offered. If this does not provide enough support and structure, an in-person evaluation session based on MI principles is recommended, to be followed by a course of face-to-face CBT sessions if the evaluation session finds that level of support is needed. Each component of the program is described in detail later in the manual.

Which treatment settings can use this program?

This program can be used in a wide range of treatment settings and facilities. Residential or inpatient programs can use it to provide continuing care to clients after they leave the facility. In more rural areas, where clients may travel some distance to attend either residential or outpatient treatment, the program can be used to provide continuing care following completion of a more intensive level of care, whether inpatient or outpatient. In such situations, the program may be limited primarily to telephone contact only, with less opportunity for face-to-face stepped care sessions.

The program can also be used by outpatient facilities to provide ongoing recovery support during and after IOP or standard OP treatment. For example, an IOP could start clients on the telephone program in their last month of IOP, and continue it for some period of time after discharge. It is

also possible to start the program earlier in the treatment process for higher risk clients, to provide additional individualized support and prevent early dropout. In our current research projects, for example, we begin providing the program to IOP clients in their third week of treatment. The City of Philadelphia has recently begun a pilot program with publicly funded clients in which this telephone recovery support protocol is provided at the very beginning of treatment, to prevent high risk clients from falling through the cracks in the system.

How is this program different from other outpatient/continuing care programs?

An obvious difference is that this program is provided primarily via telephone contact, rather than face-to-face sessions. However, there are a number of other differences:

- The program makes use of an individual as opposed to group format
- Each session begins with a structured assessment of risk and protective factors
- The focus of the work in each session is guided by the assessment results
- There is an emphasis on working on specific coping responses to risky situations
- Progress on decreasing risk and increasing protective factors is monitored and tracked over time
- Specific guidelines are provided for when and how to change level of care, based on changes in risk and protective factors over time

Is extra staff needed to manage the program?

Whether additional staff members are needed to implement this program depends on several factors. Most counselors have some time during the day when they would be available to deliver the telephone protocol. Given that each session is typically 15-20 minutes long, a counselor could do three sessions in an hour, provided that clients were available at that time. Therefore, a program might be able to provide up to 3 months of telephone contact (i.e., 10 calls) to program graduates without needing much additional staffing. Often, counselors who are providing IOP or residential care find it rewarding to be able to follow their graduates after they have completed an initial phase of treatment.

On the other hand, additional staff will clearly be needed if a treatment facility decides to implement the program earlier in the treatment process or to extend it over longer periods of time. For example, the potential pool of program recipients is much larger if it is provided to all clients in an IOP, as opposed to only those clients who complete that phase of care. In addition, the stepped care component of the program, which includes individual CBT sessions, can require additional staffing. However, it should be stressed that the version of the program that was evaluated and found to be effective in our first two studies did not include a stepped care component. Therefore, treatment facilities could opt to try to re-engage clients back into their standard programming should stepped care be required, rather than provide the individual CBT described here.

Finally, we have found that computerizing some aspects of the program, particularly the recording and tracking of risk and protective factor scores from the progress assessment at the start of each session, can be helpful to counselors delivering the program. These data can be collected via paper and pencil, but it is more difficult to quickly review changes over time in the absence of a data base. At this point, software that performs these functions is not available.

Therefore, some staff time may be needed to set up a database if the facility desires to computerize the data collection process.

What special issues might arise when dealing with different cultural groups?

The majority of clients who have participated in our studies of telephone continuing care have been African Americans. We have looked at whether there are any differences in outcomes between African American and white clients, or between men and women, and have found no evidence that such differences are present (McKay et al., 2003).

What about clients with co-occurring disorders?

Clients who were currently flagrantly psychotic have not participated in our studies of telephone continuing care, nor have clients with severe cognitive deficits. Therefore, it is not clear whether the intervention would be effective with such clients. However, we have included clients with other co-occurring psychiatric disorders in our studies, including schizophrenia-spectrum disorders, major depression, bipolar disorder, and anxiety disorders—including PTSD. Analyses indicate that neither a history of major depression nor current severity of psychiatric symptoms at the beginning of the program predicts poorer substance use outcomes in telephone continuing care as compared to face-to-face interventions (McKay et al., 2005a). It should be noted that we have required clients with major psychiatric disorders, such as major depression and bipolar disorder, to have met with a psychiatrist and have been evaluated for medication in order to be in our studies. Some follow up with a psychiatrist is also recommended for such clients.

Clients with a range of other co-occurring problems, such as poverty, poor social support, medical disorders, and criminal justice involvement have participated in our studies. Procedures for addressing co-occurring problems are presented later in this manual. The progress assessment that is done at the beginning of each call includes information on factors such as psychiatric symptoms, work, and social support, in order to monitor these areas and guide interventions.

Is it evidence-based?

As was mentioned earlier, this program has been evaluated in four randomized research studies, all of which have provided evidence of its effectiveness. These studies have featured large sample sizes, two year follow-ups, high follow-up rates, and confirmation of self-reported alcohol and drug use outcomes with biological tests or collateral reports. The studies were all conducted in publicly funded clinics in Philadelphia, with clients who had extensive histories of alcohol and cocaine use, multiple prior treatment episodes, and high rates of co-occurring problems such as poverty, psychiatric disorders, and lack of social support for recovery. The first two studies are completed and were published in high quality journals. The third study is nearing completion, and data out to the 18 month follow-up for the complete sample have been presented at professional conferences. The fourth study is still in process, although preliminary data out to the 9 month follow-up are positive as well. The results of each study are described briefly here.

In the first two studies, 359 graduates of 4-week IOPs were randomly assigned to 12 weeks of continuing care “treatment as usual” (e.g., group counseling), individualized CBT relapse prevention, or telephone continuing care (study 1 focused on alcohol dependent clients; study 2

on cocaine dependent clients). The first two interventions were provided via two sessions per week in the clinic; the telephone intervention consisted of one 15 minute call per week, plus one support group meeting per week for the first four weeks. The results indicated that the telephone intervention produced higher rates of self-reported total abstinence from alcohol and cocaine than TAU. For example, in the three months prior to the 24 month follow-up, 65% of clients in the telephone condition were abstinent, as opposed to 47% in the TAU condition. These results were supported by biological test results for heavy drinking (i.e., liver function tests). Among the cocaine dependent clients, the telephone intervention produced lower rates of cocaine positive urine tests over the 24 month follow-up, as well as better liver function test results (McKay et al., 2004; 2005b). In the case of the cocaine patients, the size of the treatment effect favoring the telephone intervention got larger over the 24 month follow-up.

Additional analyses provided important information on who the telephone intervention was most and least appropriate for, and how the intervention worked to sustain good outcomes after it was completed. There was little evidence that pretreatment characteristics predicted which clients would respond better or worse to telephone continuing care, as compared to the other two interventions. However, progress in IOP turned out to be a good predictor. We developed a summary index of performance toward the goals of IOP, which included achieving abstinence from alcohol and cocaine, regular participation in 12-step programs, adoption of a goal of total abstinence, good social support, and confidence in being able to use coping behaviors to avoid relapse (McKay et al., 2005a). Clients who achieved reasonable progress toward these goals while in IOP—which turned out to be about 80% of the sample—did better in telephone continuing care than in standard group continuing care (e.g., TAU). However, the 20% of the sample who made particularly poor progress in IOP did better in TAU than in telephone continuing care (McKay et al., 2005b). This suggests that clients who are really struggling in IOP should not be switched over entirely to telephone continuing care. Rather, they should probably be retained in IOP until they have achieved some of the key goals of that phase of care.

Our group also undertook analyses to determine how the telephone intervention achieved its positive results. This procedure, referred to as mediation analysis, indicated that the favorable effects of the telephone condition appeared to be at least in part due to the fact that it produced higher rates of self-help attendance during continuing care than group counseling, as well as higher levels of self-efficacy and commitment to abstinence during the subsequent three months (Mensing, Lynch, TenHave, & McKay, 2007). Therefore, the telephone intervention first led to changes in pro-recovery behaviors (e.g., self-help attendance), and then produced positive changes in beliefs and motivation that were sustained after the intervention had ended. The analyses demonstrated that these three factors accounted for much of the treatment effect favoring the telephone intervention over TAU.

The third study included 252 alcohol dependent clients who were recruited after their third week of IOP in publicly funded addiction treatment programs. In this study, the telephone intervention was provided for 18 months (weekly for 8 weeks, every other week for the next 10 months, and once per month for the final six months). All participants in the study received treatment as usual in the IOP, including any standard outpatient sessions offered after IOP had ended. The comparison conditions were (1) telephone calls that were offered on the same schedule, but

included only the progress assessment and very brief feedback on level of risk (TMF), and (2) treatment as usual in the IOP, with no telephone calls (TAU).

Data from the first 18 months of the follow-up were presented recently at a conference. The results indicated effects on alcohol use outcome measures favoring telephone monitoring and counseling over TAU that increased in size over the 18 month follow-up. With percent days alcohol use, the treatment condition x time interaction was significant ($p = .01$). For example, in months 13-15, alcohol was used on 26% of the days in TAU, 11% of days in TMF, and 3% of days in the condition that provided both monitoring and counseling (TMC). Pair-wise comparisons indicated TMC produced less frequent drinking than TAU at 9 and 12 months ($p < .05$), 15 months ($p < .001$), and 18 months ($p < .03$), and less frequent drinking than TM at 6 months ($p = .01$). In addition, TMF produced less frequent drinking than TAU at 12 months ($p = .03$). Similar results were obtained with percent days heavy drinking. With the dichotomous measure of any drinking within each 3 month segment of the follow-up, there was a significant main effect for treatment condition ($p = .04$). Difference of least squares means indicated lower rates of any drinking in TMC relative to TAU across the follow-up ($p = .02$), and a trend in the comparison of TMF to TAU ($p = .08$). Again at the 15 month follow-up, for example, rates of any alcohol use in the prior 3 months were 52% in TAU, 41% in TMF, and 23% in TMC. (McKay et al., 2009).

Finally, Study 4 is testing two 24 month versions of our telephone counseling program in cocaine dependent clients in publicly funded IOPs. At this point, over 240 clients have been randomized in this study, to one of three conditions: IOP only (TAU), IOP plus telephone counseling continuing care, or IOP plus telephone counseling continuing care with small incentives for completion of calls (i.e., \$10 per call in the first year). Our initial examination of the outcomes from this study indicates the two telephone continuing care conditions are both producing lower rates of cocaine-positive urine samples at the 3, 6, and 9 month follow-up than is TAU. Rates of cocaine-positive urines among Clients receiving telephone continuing care averaged about half the rates of cocaine positive urine samples at the 3 and 6 month follow-ups compared to TAU (20% vs. 38%) and less than one-third the rate of positive urines at the 9 month follow-up (20% vs. 62%) (McKay et al., 2008).

What adaptations to CBT and MI should be considered when you can't see the person you're talking to?

Adaptations we have made to standard practice have been in response to the increased level of distraction we must overcome to help keep the client focused on the call. Rather than coming to a quiet office with little else to attend to except the task at hand, clients take the calls wherever they happen to be at the scheduled time. It is not unusual for clients to call from noisy or even public places. Therefore, we have found it helpful to:

- Maintain a consistent structure for the calls. This helps the client anticipate the counselor's questions regarding recent status, upcoming high-risk situations, and goals, rather than have to rely on hearing everything perfectly.
- Use more questions and simpler forms of reflective listening than might be the case in face-to-face CBT and certainly in face-to-face MI. We also keep the conversation somewhat faster-paced with none of the extended silences that might be appropriate when meeting in person.

- Be warmer and more effusive in our affirmation of the client than we might be in person. Enthusiastic expressions of appreciation for the client's successes that might sound phony or over-the-top in person often sound just about right over the phone.

We should also note that the counselor must listen more carefully over the phone than in person simply to understand the client's words. The sound is somewhat degraded at best, and it is common to hear other conversations or a TV playing in the background. The lack of nonverbal communication means that the counselor must pay close attention to the client's manner on the phone in order to guess at aspects of the client's demeanor that would be immediately obvious in person. The counselor must make these additional efforts at paying attention in a setting, where, because of the lack of face-to-face contact, it may be tempting to try to read email, take care of routine paperwork, or otherwise multi-task. We encourage counselors to resist these temptations and give the calls the same status that they would give an in-person session.

Discuss management costs and reimbursement availability, with list of resources

We currently have no information on this. Will check.

How should clients be identified and selected for participation?

The telephone continuing care protocol can be offered to two groups:

- Graduates of an initial, more intensive phase of care, such as residential treatment or IOP
- Clients who are still in IOP, but who may be at risk for dropout

Graduates of residential or IOP treatment should be approached in the last week or two of treatment and told about the availability of the telephone continuing care program. It should be described as one of several options for continuing care, which also may include clinic based care and self-help programs. These options are not mutually exclusive; for example, clients could participate in the telephone program and attend AA or even group counseling. The important considerations are whether the client is motivated to participate in some form of continuing care and whether the telephone program is particularly appealing. Clients who anticipate difficulties attending standard clinic-based continuing care due to transportation problems, parental or work responsibilities, or a desire to "move on" with their recovery may be particularly good candidates for telephone-based continuing care.

If the goal of offering telephone continuing care is to provide additional recovery support to clients while they are attending IOP, clients can be considered immediately for the program. In our studies, we have waited until clients have been in IOP for at least two weeks before enrolling them in the research project. Therefore, it is not clear how effective the program is for clients who have not been in treatment that long. Although we would expect higher dropout rates among clients who are offered the program at or shortly after intake, there are likely to be some at-risk clients in this group who will benefit from the support provided by telephone contact.

If possible, it is recommended that clients begin this protocol prior to graduating from their initial treatment program, in order to increase the likelihood that they will make a successful transition to continuing care. Initial levels of care range considerably in duration, with, for example, some IOPs only two weeks long whereas others are three or four months in duration. Given the high rate of dropout in most outpatient programs, it is important to engage the client in

the telephone protocol before he or she either graduates or drops out of the initial phase of care. During the period of overlap, when the client is still attending IOP or OP and having telephone sessions, the calls place a greater emphasis on supporting continued engagement in that program. This is done by addressing barriers to attendance, such as problems with transportation, family roles, or employment; diminishing motivation for treatment or recovery; or problems with the IOP or OP program itself.

Another important consideration in the selection of clients for the telephone program is what other continuing care options are available to the client. Our research, described above, indicates that some high risk clients will do better if they receive twice-weekly, clinic-based group counseling rather than telephone continuing care. In this study, “high risk” was determined by progress toward the main goals of IOP along with whether the client was dependent on more than one substance at entrance to IOP. The IOP goals, assessed over the past 30 days at the end of the IOP, were as follows:

- abstinence from cocaine
- abstinence from alcohol
- commitment to total abstinence
- attendance at at least three self-help group meetings per week
- at least 80% confidence in being able to use coping behaviors to avoid relapse
- Some degree of social support for abstinence

Also added to this index was dependence on both alcohol and cocaine upon entrance to treatment. Clients who had any combination of four or more of these seven factors (i.e., dependence on both alcohol and cocaine and failure to achieve three IOP goals, dependence on alcohol only but failure to achieve four IOP goals, etc.) did better in twice weekly group counseling than in telephone continuing care. This effect was present out through month 21 of the 24 month follow-up. In our sample, only 20% the clients were categorized in this high risk group, quite probably because the sample was limited to those who completed a 4-week IOP program.

If clients have the option of participating in structured continuing care at the clinic after IOP has ended, it makes sense to consider their progress in IOP before recommending telephone continuing care. Clients who have done poorly in IOP may be better served by remaining at that level of care for a few more weeks in order to achieve more of the goals listed here or starting off in clinic-based continuing care rather than moving directly to telephone continuing care only.

Using the Audio/Digital Component

Audio recording of treatment sessions can be very helpful in learning to deliver telephone continuing care protocol. There are a number of relatively inexpensive devices that can be used to accomplish this. For example, digital audio recorders are available for around \$100, and recordings can be made by patching a cable into the telephone receiver line and plugging it directly into the audio recorder. These patching cables are less than \$25, and no microphones are needed. This equipment can produce high quality digital audio tape recordings that capture everything said by the counselor and the client.

The recordings can be used in several ways. You can listen to your sessions determine whether all the elements of the program were successfully addressed. We have included a rating form in

the material provided in the program that can be photocopied and used for this purpose. Peers or supervisors can also listen to and rate the tapes for adherence to the protocol, using the same form. To get over any initial self-consciousness about being tape recorded, we recommend you consider initially recording every session. In addition, being able to revisit sessions is particularly helpful as you are learning the protocol. Over time, awareness of the recording process will drop for you and for your clients, and more intermittent or targeted taping is usually sufficient.

The program also includes several audio examples of telephone continuing care sessions. These are provided to give you a better sense of how the sessions actually proceed and how each component described here in the manual is delivered. We suggest you first read the manual, and then listen to these sessions.

General Comments on Telephone Continuing Care

Before proceeding with specific information about the protocol, some general remarks are in order. Telephone-based continuing care is less burdensome to clients, and most report that they like this form of treatment delivery. However, it can also be more difficult for therapists to deliver, because of the lack of access to nonverbal cues. There is also less of a margin for error, given that the sessions are short and it is more difficult to re-connect with a client over the telephone if a rupture to the therapeutic alliance occurs. Attention to the following factors will facilitate the successful delivery of telephone continuing care.

Creating and Maintaining a Therapeutic Alliance on the Telephone

To ensure maximal benefit for the client, the counselor must consistently play close attention during the sessions to what is being said—and not said! It is the counselor's responsibility to convey to the client that each call is important and to be taken seriously. As much as possible, phone call appointments should be at the same time each week, and the counselor's consistency and availability at that time set an important tone and will also serve to communicate to the client the importance of the phone sessions. We have found that many, if not all, counselors will occasionally feel some temptation while conducting the telephone sessions to attend to other business in their office (i.e., read an email, open mail, and so forth) while the client is talking. Such temptation is entirely understandable, but must be resisted. Clients notice when the counselor is preoccupied while on the telephone, and feel less connected and understood in response. Counselors must also be careful to note any signs of trouble in what is either said or not said by the client, and should address these issues rather than ignore them. While sessions with clients who are doing well may at times be quick "check-ins," if sessions are routinely empty and boring, this is a good sign that important issues are being avoided!

It is very important to give the client plenty of positive comments for what they are doing with regard to their treatment, including things such as calling on time, having their client workbook with them, filling out the Progress Assessment form prior to the session, and so forth. Counselors should listen for changes in behavior patterns that might indicate cause for concern, particularly things the client has identified as 'red flags' (see below on the orientation process). The longer the counselor and the client do this, the more the session will take on a conversational tone, but initially the phone sessions may feel awkward due to their newness, brevity, and the

structure of the protocol. To keep the telephone sessions sounding fresh and spontaneous, as opposed to overly “scripted,” it is best if counselors develop their own approach to covering the required material. What we provide here are sample scripts that might be useful in developing such an approach.

Finally, some counselors are initially uncomfortable working with a client whom they can not directly observe, or get urine samples from to verify reports of abstinence. Our experience is that clients will admit to problems, including substance use, during telephone calls. However, there is surely some degree of underreporting, and at times outright misrepresentation about episodes of substance use. In these cases, clients invariably end up conveying that they are in trouble, usually by missing scheduled telephone calls or sounding superficial or avoidant on calls they do make. An experienced addictions counselor will quickly figure out what is happening. As is described below, we will often invite clients in for a face-to-face sessions—and ask for a urine sample—if we have reason to believe that they have started using alcohol or drugs again. The important point is that the maintenance of an alliance in a telephone-based continuing care intervention requires that the counselor act on concerns and not succumb to the temptation to let something go without addressing it.

Establishing a Recovery Support Structure

In addition to consistency of telephone appointments, it is desirable for clients to establish additional social supports for recovery early in treatment. These may include: the client’s regular attendance at AA/NA or other types of support groups and ability to talk with another sober person before, during, or after the meetings; the client’s connection with a sponsor and her willingness and awareness of to how to utilize her sponsor in recovery; some other established way for the client to experience meaningful social contact, such as participation at church, work, family contact, school/training program, involvement with a pet, and so forth. In many cases, however, establishing these social supports becomes a longer-term goal of continuing care. Regardless of the strength of the clients’ support system, the counselor’s awareness of the establishment and utilization of these structures throughout continuing care will make it easier to listen for the development of any cracks in the structure(s), which should be interpreted as potential “red flags”.

Assessing Risk and Protective Factors

Each telephone contact should start with a structured assessment of current risks and protective factors. In one of our current cocaine continuing care studies, for example, we assess three general factors (e.g., recent alcohol or drug use, HIV risk behavior, and attendance at any current face-to-face treatment); five “risk” factors (e.g., compliance with medical or psychiatric treatment, depression, self-efficacy, craving, and being in high risk situations); and five “protective” factors (e.g., coping efforts in high risk situations, sober social/leisure activities, pursuit of personal goals, self-help meetings, and contact with a sponsor). Data gathered in this brief assessment are used to monitor current status, note changes in symptoms and functioning over time, select issues to focus on in the rest of the session, guide decisions about possible changes in level of care, and trigger case management efforts. This assessment brings considerable structure to the telephone sessions, and helps to keep it from turning into a “chat” session.

Employing CBT Techniques

Our telephone continuing care model is based on the principles of Cognitive-Behavior therapy (CBT). According to the theories on which CBT is based, substance use is viewed as a learned habit that occurs in the context of environmental triggers, intra-individual thoughts and feelings, and short- and long-term consequences. Treatment involves identifying the client's unique triggers for substance use so that he can learn to avoid them or cope more effectively with them, and helping the client learn and practice more adaptive coping skills for managing risky situations.

It is important to emphasize that therapists do not have to believe that addiction is a learned habit in order to use this program. Whatever the etiology of substance use disorders may be—learned habit, brain disease, self-medication, purely environmental, or some combination of any of these factors—clients can benefit by receiving help in monitoring their progress and developing improved coping behaviors for the stressful or high risk situations they encounter in their daily lives. The program has been used successfully with clients who embrace the Alcoholics Anonymous view of the origins of substance use disorders and with clients who attribute their addiction to environmental factors like family and the neighborhood they come from.

Intervention in CBT is based on a careful functional analysis of the client's alcohol and drug use. Substance use is viewed as a learned behavior that is associated with certain environmental antecedents and consequences, and placing the client's substance use in its individual context guides selection of interventions.

1. **Environmental Antecedents to drinking/drug use** – the external and interpersonal situations in which substance use is most likely. Clients need to learn to recognize high-risk situations and either avoid them or learn to cope with them without picking up. In telephone continuing care, clients monitor the risky situations they encounter and learn to anticipate upcoming risky situations in the interval between phone calls. Over time, clients are encouraged to make lifestyle choices that limit their exposure to risky situations.
2. **Thoughts, Feelings, and Cravings** - the link between external high-risk situations and the client's behavioral response. The client thinks that a drink would taste good, have a pleasant effect, or improve an unpleasant mood or problematic situation, so he picks up. Or, the client feels confident in his ability to wait out an unpleasant mood, so he focuses on the benefits of abstinence and engages in an alternate activity. Nearly all clients experience urges or cravings especially in early abstinence, often seeming to come out of the blue, so it is essential for them to develop a repertoire of coping skills to fall back on when cravings arise. Some situations may be so closely associated with substance use that they elicit cravings or even relapses seemingly without any thoughts on the client's part, but over time most clients learn to identify and challenge their thoughts and beliefs about substance use.
3. **Behavior** – substance use or abstinence in response to an environmental trigger or craving. Simply “not drinking” or “not using” doesn't describe behavior, so when planning for high-risk situations or reviewing a “close call” the counselor needs to

help the client identify alternate actions. At the level of a specific incident, if the client encountered a high-risk situation and didn't drink, what did he/she do instead? At a lifestyle level, clients need to develop a range of enjoyable activities that are inconsistent with alcohol and drug use.

4. **Consequences** – the results of either drinking or doing something else. Usually the short-term consequences of drinking and drug use are positive, e.g., euphoric feelings, socializing, taking a break from the work of recovery, forgetting one's problems. It is the long-term consequences that are the problem. For pro-recovery behavior, the situation is usually the reverse, with the short-term consequences ranging from enjoyment of a sober activity (which may pale in comparison to an alcohol or drug high) to the genuine displeasure of dealing with life's misfortunes. The true benefits of sobriety may take much longer to realize. The phone sessions will provide an opportunity for the client to recall the negative consequences of drinking and to review the benefits of maintaining sobriety and completing personal goals.

Many substance abusers view themselves as people that things “happen” to - things that they have little or no control over. One goal of cognitive-behavioral relapse prevention counseling is to help clients become more aware of the connections between the client's behavior and what happens to him or her. The counselor may need to help the client recognize these connections. From our experience, this is more difficult to do over the phone than in person. So, the counselor may need to prompt the client more often to be specific about the chain of events, and his or her role in setting the events in motion, while on the telephone. A second goal is to help the client get into the habit of anticipating upcoming risky situations in order to cope with them more proactively. Consistent use of the “behavior chain” - linking situations, thoughts/feelings, behavior, and results, will help the client to describe his behavior in a manner amenable to problem-solving.

The key components of CBT that are used in this program really boil down to the following four elements:

- Develop an understanding of what factors led to relapses in the past
- Learn to anticipate such high risk situations
- Identify or develop better coping responses to these situations
- Practice these new coping responses both during the call and in the period before the next call

In addition, the protocol places a heavy emphasis on weekly goals that are agreed upon by you and your client and carefully monitored during the course of the treatment.

The counselor's role in telephone continuing care:

CBT is a collaborative approach in which the counselor and client work together toward agreed-upon goals. In face-to-face CBT as a primary treatment for addiction, the counselor's role is often didactic, instructing the client about the nature of her problem and teaching new skills to overcome substance abuse. In telephone continuing care, the counselor is less didactic and functions more as a coach, guiding the client to use what she has learned in - and out of - treatment to progress toward her goals.

Increasingly, attention has been paid in CBT to increasing motivation and commitment to change. Recent manuals have incorporated Motivational Interviewing techniques into CBT, often as an initial step prior to beginning skills training. Similarly, we encourage use of selected MI techniques as part of the process of developing rapport and encouraging engagement at the start of treatment. Throughout treatment, we find that using an MI-consistent communication style complements the CBT content of the program and is also consistent with the less didactic “coaching” role of the counselor in telephone continuing care. The counselor remains active and provides structure, but the client is encouraged to be proactive and resourceful, rather than relying on the counselor’s instructions. Furthermore, use of MI style helps the counselor to attend to fluctuating motivation over time and address it as it occurs. Often, simply “rolling with” resistance as it occurs is all that is needed, but when motivation is flagging, it is relatively straightforward for the counselor to switch away from coaching coping skills to exploring motivation for change.

More about MI in continuing care:

Motivational Interviewing has been defined as “a client-centered, directive method for increasing intrinsic motivation by exploring and resolving ambivalence” (Miller & Rollnick, 2002). In MI, the counselor uses a client-centered counseling style strategically to elicit “change talk” and minimize resistance. The client-centered style is common to many forms of counseling and is familiar to CBT practitioners as a means to establish rapport and help get the client “on board” with treatment.

The client-centered counseling style in which MI is delivered is characterized by four “micro” skills, captured by the acronym “OARS.”. The first is asking ***Open-Ended Questions***. Open-ended questions tend to elicit broad, informative, reflective answers. They are useful for getting more information about where the client is in relation to readiness to change without appearing to be judgmental or leading the client. Open-ended questions are preferable to closed questions during all stages of the process. Most of the techniques associated with eliciting change talk rely on asking good open questions.

The second microskill is ***Affirming***. It is a way of validating the client’s experiences and feelings. Validation is not something frequently experienced by most drug and alcohol abusers since their concerns are often ignored or written off as lies or manipulations by significant others or other service providers. Affirmations can focus on the client’s strengths or on the client’s efforts toward change. Many clients can learn how to self affirm when thoughts or feelings are accepted by significant others. These supportive comments encourage clients to believe in themselves and resolve ambivalence by marshaling inner resources to take positive action and change behavior. Examples of affirmative responses are: “That must have been very hard for you.” or “You have already come a long way toward solving this problem.” Affirmations are particularly useful to help reduce the hopelessness and discouragement that clients may feel when struggling with maintaining a sober lifestyle or regaining sobriety after a relapse.

The third “R” in OARS represents ***Reflective Listening***. This skill can be used in a client-centered manner to demonstrate that the counselor has accurately heard and understood what the

client is saying, and in a directive manner to strengthen motivational themes. So-called “simple” reflections stay close to the client’s stated meaning by repeating or rephrasing the client’s words. “Complex” reflections use paraphrasing, continuing the paragraph, metaphor, and reflection of feeling (**ref**) to guess at the the client’s underlying meaning. Both have their uses in MI, with simple reflections allowing the client to feel heard and understood, and complex reflections serving to deepen the relationship and move the session in a different direction. In most cases, reflective listening invites further elaboration: the client can confirm or reject the restatement and then continue to elaborate on the subject if so inclined.

The fourth and last microskill is **Summarizing** what the client has said during an interview or even a part of the interview and is an opportunity for the counselor to strategically select information that should be included and minimize or leave out other information. This technique allows a client to consider the counselor’s responses, and then contemplate his or her own experiences. Summarizing is a good way to reflect back to the client his/her ambivalence. It can also be used to simply state several thoughts that the client has expressed, and invite the client to continue to elaborate. For example the counselor might say after summarizing: “So where do you go from here?”, or “What are your thoughts about all of this?” or yet “ Did I leave anything out?”

Change talk may be defined as client speech that indicates movement toward greater readiness for change. The counselor’s task during MI is to elicit change talk from the client, rather than be the one making the argument for change, and the directive aspect of MI involves eliciting, reflecting, and amplifying change talk, while also minimizing resistance.

Change talk may be categorized as follows (Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003):

- **Desire** for change
- **Ability** for change
- **Reasons** for change
- **Need** for change
- **And, Commitment** for change.

Of these categories, the first 4 may be viewed as “preparatory” language that is associated with an increase in commitment for change. Commitment language, particularly toward the end of a session, is associated with better behavior change outcomes.

The typical manner of eliciting change talk in MI, and particularly when combining MI and CBT, is to ask open questions that focus the client’s attention on behavior change and responding in a manner that heightens the client’s perceived importance of and confidence for change.

Clients who are ambivalent about change, or whose motivation to maintain change is diminishing will make statements often viewed as evidence of “denial” of a problem. Rather than confronting “denial” or resistance head-on, the counselor using MI will “roll with” resistance, usually through skillful use of reflective listening. The counselor uses reflective listening to convey understanding of the client’s perspective and avoids getting into an unproductive argument in which the client continually defends his/her reasons to remain out of treatment while the counselor argues for re-engagement. MI may be considered a “constructive

discussion about behavior change” (Rollnick, Mason, & Butler, 1999) and the aim of these techniques is to return to a constructive discussion as quickly as possible.

As stated above, the main method for managing resistance in MI is to use reflective listening. Simple reflections, staying close to the client’s stated content and level of readiness for change, generally convey an understanding of the client’s concerns and can serve to defuse resistance. Amplified reflections, in which the client’s resistance is reflected back in a somewhat exaggerated manner, often elicit a backpedaling response away from the resistant statement. Double-sided reflections, including both change talk and resistance, encourage working through of ambivalence.

Client: I got 3 years of sobriety by going to meetings, but this time around I just can’t get into it. It’s the same thing, over and over again.

Counselor: You’re having a hard time getting motivated to go to meetings. (simple reflection)

Counselor: You think meetings are useless (amplified reflection)

Counselor: Something’s getting in the way of going to meetings, even though you know they can be helpful to you. (double-sided reflection)

Resistance may also be managed on a strategic level, for example, emphasizing the resistant client’s control over whether and how to change, reframing clients’ resistant statements into opportunities to explore options for change, or guiding the conversation away from what the client won’t do to what he is willing to consider.

Client: I got 3 years of sobriety by going to meetings, but this time around I just can’t get into it. It’s the same thing, over and over again.

Counselor: You want to feel excited about recovery again, and you haven’t found the right support group yet (reframing)

In our model of CBT based continuing care, MI style is used primarily to increase client motivation for and engagement in ongoing monitoring, problem-solving, and enacting chosen solutions to anticipated problems. Therefore, there is considerably more activity and direction on the part of the counselor than in a purely MI-based intervention. The counselor is informed by the insights of the MI approach to remain alert to fluctuations in motivation and to be prepared to address decreases in motivation appropriately.

Similarities and differences between “regular” CBT and telephone continuing care:

CBT in telephone continuing care maintains the same basic principles as CBT as a primary treatment with some important differences in practice. Rather than teach a core set of skills for recovery, we help the client to engage in week-to-week management of her addiction. Therefore, the agenda of each session is not tied to the client’s completion of tasks related to each topic or skill, but rather to ongoing assessment of the client’s substance use, relapse risk, and progress toward developing a rewarding, substance-free lifestyle. Certainly, learning to self-monitor relapse risk and pro-recovery lifestyle behavior may be seen as an essential skill for

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maintaining abstinence, but for the most part we de-emphasize teaching coping skills in favor of identifying and reinforcing use of existing skills.

Telephone continuing care was developed to follow completion of IOP, and is conceptualized in terms of maintaining and building upon treatment gains regardless of whether the client has achieved initial abstinence. Consistent with cognitive-behavioral relapse prevention, we focus not only on eliminating substance use but building a balanced lifestyle rich in intrinsically rewarding activities. We provide a basic orientation to treatment, but we also assume that clients have been exposed to certain basic concepts, regardless of the orientation of the IOP. For example, we assume that clients have been introduced to the idea that being in certain situations is more likely to result in substance use, and that they have begun to identify those situations. Therefore, our assessment of the client's substance use history is much briefer than it would be in CBT as a primary treatment. We conceptualize use in terms of functional assessment, but do not spend time building up the client's patterns of use from detailed analysis of specific episodes – rather, we begin with client self-report of their environmental triggers for use. However, we process relapses in terms of functional analysis. Similarly, we model and guide the client through problem-solving rather than explicitly teach clients how to solve their problems.

Attention is paid to cognitive factors in achieving and maintaining abstinence but the focus to a greater degree is on use of behavioral coping skills. Cognitive coping skills such as thinking through the drink or reminding oneself of the rewards of sobriety are emphasized over extensive challenging of negative automatic thoughts. The emphasis on behavioral coping is practical: calls are brief, Socratic questioning is more difficult over the phone than in person, and there is little opportunity in routine monitoring and counseling to teach the client to challenge dysfunctional thoughts in a formal way.

Our model of telephone continuing care was developed pragmatically and therefore includes some elements that are not typical of CBT as a primary treatment. One area is our choice of elements to include in the Progress Assessment conducted at each contact. In addition to items characteristic of CBT, such as coping with high-risk situations, we have included items reflecting factors associated in prior research with outcome, so that they can be addressed as needed. One such factor is depression. Based on prior research showing poorer outcome among client with current depression, we screen for persistent depressed mood at each contact and are quick to make referrals to additional treatment. Another such factor is 12-Step meeting attendance. We do not insist on meeting attendance, nor do we spend a lot of time exploring barriers to attendance among clients who firmly opposed to participating, but we do inform clients that we have found that those who attend more 12-step meetings tend to do better over time, and that we will therefore monitor their attendance and active participation among other “protective” factors such as use of proactive coping and development of rewarding sober activities.

Another area in which our practice diverges from more traditional CBT practice is in our use of 12-step and “recovery” language when presenting concepts and engaging the client in problem-solving. We are aware that most of our clients enter telephone continuing care having been in 12-step-oriented IOP, and therefore are more likely to be familiar with terms like “people, places, and things” than with the phrase “environmental antecedents.” We often refer to periods of sustained abstinence and improved psychosocial functioning as “recovery.” Rather than

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attempt to teach a new set of terminology we use familiar phrases when possible. Similarly, while we do not explicitly espouse a disease model, so many aspects of managing a chronic disease are essentially the same as those involved in modifying a learned behavior that we do not spend time challenging a disease model and explicitly substituting a learned-behavior model.

Detailed outline: Orientation to telephone continuing care

Goals of the orientation session include developing rapport, providing the client with the information she needs about the program, identifying targets for ongoing monitoring, and shoring up motivation for recovery and commitment to treatment.

Before the orientation session:

If you are already familiar with the client, review his progress to date and be prepared to share what you consider to be relevant relapse risks and recovery goals. If you have not yet met the client, review available information regarding his addiction and recovery history, co-occurring problems, and treatment progress to date.

1. Develop rapport and set the agenda for the orientation session.

Welcome the client. Acknowledge her progress, and congratulate her for her achievement so far. Demonstrate appreciation for her commitment to participating in continuing care. Elicit questions or comments regarding the procedures (such as additional paperwork), if any, that she may already have completed before your session, and respond appropriately. Let the client know how long the session will last and what it will include. Allow enough time at the end of the session to take care of any administrative matters. Overall, even though you need to convey quite a bit of information about the structure and content of the program, the tone of the session should remain collaborative.

2. Briefly explain the telephone-based continuing care program, including adaptive care or “step-up.”

Review the basic procedures briefly – that there will be regular phone calls in which you will touch base about how the client is doing, provide some feedback about what you are hearing, and work with the client to overcome relapse risks and achieve his goals. Engage the client in some discussion about how he may find the calls helpful, and begin to troubleshoot barriers to participation.

What about this sounds most helpful to you?

What might get in the way of completing phone calls?

Reinforce the importance of the phone calls, being prepared for the phone calls, and being willing to ask for help. Fill in the dates corresponding to each time frame for “when do I call my counselor” in the client’s workbook. Review any program-specific rules regarding call completion, e.g., the counselor’s working hours and availability for rescheduling calls, whether the client may be discharged for failing to complete a minimum number of calls, and so forth.

In addition to eliciting the client’s anticipated barriers to completing the phone calls, be alert to issues that may pose a problem with treatment engagement or lead to early dropout. For example, clients who live in halfway houses, recovery houses, or transitional housing may have limited access to a phone; clients without a land line may not have enough minutes on their cell

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phone. Clients whose lives are chaotic in the wake of their active addiction, or who are coping with co-occurring problems, may have difficulty calling at the scheduled time. Clients who return to work or resume child care responsibilities may not view the calls as a priority. Clients may not think it's important to call if they are doing well; conversely, clients may not want to call if they are doing poorly or haven't followed through on their goals.

There is no need to raise these concerns all at once, but be aware of which ones may be relevant as you get a sense of the client's current situation. Engage the client in problem solving, and ask him what he thinks you should do if he misses a call.

It sounds like your top priority is keeping your job, and you don't always know your schedule in advance. What do you think will be the best way to make sure we talk regularly?

You deserve a lot of credit for the work you've done up until now. Sometimes, when people are doing well, they don't think they need to continue with the calls. What do you think?

The counselor should also explain to the client why increases in level of care may be recommended at some point, and how the telephone sessions will be used to make that decision. Explain that you and the client can adjust his treatment goals as he progresses, and that you may recommend "step up" care if he runs into difficulty. The details of this explanation will depend on the length of the continuing care program and available adaptive care options. At the very least you should let the client know that you may recommend a higher level of care if he relapses or if the Progress Assessment indicates that he needs additional support.

We're going to set some treatment goals today, but we'll review them from time to time to make sure we are still working on things that are most relevant to you.

If you keep on doing well, we'll stick with biweekly calls. If your risk for relapse increases, we might want to talk more often to help you get through whatever is going on at that time. If it looks like you need more support than I can offer on the phone, I may recommend that you come back to group for awhile.

The counselor should stress that a recommendation for increased level of care is not a punishment. Rather, the counselor and the client are working together to improve the client's substance abuse status, and if the current approach to treatment is not working as well as it should, another approach needs to be tried. The counselor might say something like:

"If you went to your doctor because of an infection and the first medication she gave you didn't seem to be doing the job, you would want your doctor to either increase the amount of the medication, add another medication to the one you were taking, or switch medications entirely. You would expect the doctor to keep adjusting your treatment until you got better."

Obviously, treatment for substance abuse is different from that for infections in many ways, not the least of which is that stepped-up treatment usually requires a lot more work than switching medications! However, the counselor may be able to increase the willingness of the client to go along with changes in the treatment protocol if an emphasis is placed on the message that “we’re in this together, and let’s see if making these changes will help you achieve your goals more quickly.”

3. Identify treatment goals and targets for ongoing monitoring.

Begin with a brief discussion of the client’s progress so far, and use the workbook exercises to narrow the focus to specific high-risk situations, pro-recovery activities, and short- and long-term goals for ongoing monitoring. Frame the discussion in terms of helping the client to be even more proactive in managing her addiction – doing more of what has been successful and catching problems in the early stages before they lead to relapse.

Listen carefully, and guide the client to choose the most relevant items for ongoing monitoring. Don’t push too hard in the initial session, especially if you don’t already have a working relationship with the client, but ask permission to challenge her if needed as you go along. By the end of orientation, you should be able to specify high-risk situations, pro-recovery activities, and initial goals clearly enough to be able to ask about them in the Progress Assessment.

Suggested prompts to open the discussion of progress:

How have things been going since you started treatment?

[if past recovery] What is different about this time?

What are the most important things you are doing to stay alcohol and drug free now?

Suggested prompts to help shore up motivation and identify motivational “hooks” for later counseling sessions:

What are your most important reasons for staying drug free now?

What are the best things about recovery for you?

What led you to seek treatment at this time?

What gives you the most hope at this time?

What are the “red flags” I should look out for that will let me know you are on the road to relapse... if I see that any of these things are happening, can I bring it up in the session?

a. Identifying high-risk situations:

Use the workbook exercise to help the client identify up to five high-risk situations for ongoing monitoring. Include external, environmental triggers as well as internal, cognitive or emotional triggers. Review of past relapse episodes can help in identifying relapse risks. Include discussion of particular times of year – holidays, birthdays, personally meaningful anniversary dates - as possible triggers for periodic follow-up as well.

Environmental triggers should be personally relevant situations that the client is fairly likely to encounter in the upcoming weeks or months. Common environmental triggers include certain times of day (e.g., “happy hour”), handling money, being in certain neighborhoods, stress at

work, watching sports on TV, being around friends or family members who are using drugs or drinking, hooking up at a bar or party, or visiting a prostitute.

Cognitive and emotional triggers are distinct from the actual urge, desire, or craving for substances. You can use the commonly cited acronym “HALT” (hungry, angry, lonely, and tired) as a jumping-off point. Other common emotional triggers include boredom, frustration, depression, symptoms associated with psychiatric diagnoses such as PTSD, a weariness of struggling with recovery, or a desire for excitement or escape. It may be difficult for some clients early in recovery to identify the thoughts and feelings that lead to urges. In that case, continue to probe for thoughts and feelings associated with risky situations the client encounters over the course of continuing care, to help identify the ones most associated with urges to use substances.

Difficult interpersonal interactions (e.g., conflict with significant others) that give rise to unpleasant emotions can be considered either situational or cognitive/emotional – categorizing the triggers is less important than remembering to include both internal and external cues for drug use.

[If client has been abstinent in the past] What led up to your most recent relapse?

[If client has had no substantial abstinent time] What have been the main barriers preventing you from staying alcohol and drug free in the past?

What are the people, places, and things you know you need to stay away from in order to stay alcohol and drug free?

Are there particular dates, or times of the year, when you will need more support to stay alcohol and drug free?

What have been the most difficult parts of recovery for you?

b. Identifying pro-recovery lifestyle activities:

Use the workbook exercise to help the client identify up to five pro-recovery social/leisure lifestyle activities for ongoing monitoring. The rationale is that simply “not using” is a starting point but that overall life balance is important for building and strengthening recovery in the longer term. Many clients will relate to having picked up when bored or socially isolated. Therefore, these should be activities that can promote development of an alcohol and drug free social network. For example, a client who enjoys reading may be encouraged to attend a book club, attend an author reading at the library, or take a creative writing class. Attendance at religious services or church events, if the client wishes, may be monitored in this category.

Clients who are overwhelmed by responsibilities at work or home may need to be reminded that having lunch with a co-worker, sitting with another mom while the kids play at the park, or even watching TV with sober family members can contribute to a balanced pro-recovery lifestyle. It may be difficult for clients who live in recovery houses or other supervised housing to identify relevant activities because they are subject to so much structure. If that is the case, identify one or two activities if possible, and revisit it as the client begins to have more freedom.

*When you have been in recovery in the past, how have you spent your free time?
Before you got involved with alcohol and drugs, what kinds of interests or hobbies did you have?
Whom do you interact with in an alcohol and drug-free environment? What kinds of things do you do together?*

c. Identifying goals:

Use the workbook exercise to help the client identify short-term and/or long-term personal goals for ongoing monitoring. There is room for almost limitless flexibility in setting specific goals. We generally encourage clients to consider long-term, “big picture” goals while also recognizing that many clients are not ready to think beyond remaining sober on a day-to-day basis. Individual programs may emphasize certain goals, such as achieving and maintaining employment or improving parenting skills.

If the client can identify one or more long-term goals, help her to set shorter-term goals that she can pursue during the interval between phone calls. For example, a client who wants to change careers may set as her first goal filling out applications to nursing school; a client who has been neglecting her chronic medical condition while in her active addiction may set as her first goal making an appointment to see the doctor. If the client is not ready to think in terms of goals beyond immediate sobriety, encourage her to elaborate on the activities she needs to do in order to strengthen her recovery and revisit the topic of broader goals later. At a very minimum, the client should be able to identify a simple goal related to remaining substance-free in the interval between orientation and the first phone call.

*What are some of the personal goals you would like to achieve in recovery?
What will successful recovery look like to you?*

*What are the most important things you need to do right now to stay abstinent?
[If client has had abstinent time in the past] What was most helpful/important to you in staying abstinent in the past? What do you need to do differently in order to succeed this time?*

What might be a first step toward achieving this goal? What could you accomplish by the time we talk on the phone?

4. Introduce the Progress Assessment Worksheet.

Review the structure of the phone calls: that you will begin with a brief assessment to see how the client is doing, followed by counseling and goal-setting. Give the client a copy of the Progress Assessment and step through it exactly as if you were on the phone. Ask the questions with a time frame of “in the past week.” Take time to prompt for the specific risky situations, pro-recovery lifestyle activities, and personal goals you just identified. Elicit the client’s thoughts and feelings about completing the measure. Address any misunderstandings or misgivings the client may have about ongoing monitoring, and emphasize that accurate, honest responding is the most important aspect of the work.

In the past week, how many times were you in any of the situations you identified as your people, place, and things? That means the risky situations that you checked off in your workbook. Let's take a look – yours were arguing with your wife, being around your brother, and being bored or angry. How often did any of those things happen in the past week?

5. Provide feedback.

Show the client how the Progress Assessment is scored, and review her Risk and Protective factor scores. Ask the client what she thinks about the feedback, and answer any questions she may have about the procedure. Remind her that you and she will keep track of her Risk and Protective factor scores from week to week as an early warning system to guard against relapse, and also to help the client give herself credit for continued progress.

As you can see, you can get up to 2 points for each item. Usually, if you are on the right track, your risk scores will be low and your protective scores will be high. You can keep track of the scores on your worksheet if you want, and I'll always let you know your scores for each call. The purpose of these scores is to be able to keep track of your progress and notice any small changes in the wrong direction before they turn into big problems.

6. Ask about upcoming high-risk situations.

As in each call, ask the client what risky situations he is likely to encounter in the interval before the first phone call. Early on in the process, clients may need help identifying upcoming high-risk situations. Probe for the people, places, and things identified for ongoing monitoring in addition to other common risks. Guide the client in briefly planning how he will handle any expected high-risk situations. As much as possible, elicit the plan from the client before adding your own suggestions.

What high-risk situations do you think you will face between now and when we talk on the phone next week? How about any of the people, places, and things on your list? And what about the football game on Sunday, where are you going to watch that? What do you think is your safest choice?

7. Set a goal for the interval before the first phone call.

Help the client identify one or more specific goals to work on before the first phone call. The first phone call will be in just a few days, so this will be an opportunity to practice identifying very specific short-term behavioral goals or determining how to recognize progress toward longer-term goals.

8. Take care of any outstanding administrative matters, and schedule the first phone call.

Depending on the structure of the continuing care program, you may have any number of administrative details to attend to before the client leaves, ranging from collecting co-pays to

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validating parking passes. Administrative matters relevant to the clinical success of telephone continuing care include obtaining or updating contact information and developing a crisis plan.

Because you will be working at a distance, it is essential to have complete and up-to-date contact information for the client. Obtain at least one “emergency contact” – someone whom you can call and leave a message if you can’t reach the client. If the client lives in an unstable or temporary living arrangement, the emergency contact should not be an apartment- or house-mate but rather a sober friend or family member with a stable address and working telephone.

We have included a sample crisis plan designed to help the client determine what to do and whom to call in case of substance-related, medical or psychiatric emergency. The telephone continuing care program may have round-the-clock crisis services available, but more likely the client will need to rely on other community resources in case of emergency.

When scheduling the first phone session, anticipate the various logistical problems that often interfere with completing calls, such as scheduling conflicts and access to a phone. We have found that offering to provide sessions face-to-face can help engage clients who would otherwise not be able to participate.

One important question to be addressed during the orientation session is who should be responsible for initiating the call—the client or counselor? There are pros and cons for each option. Asking the client to initiate the call communicates the counselor’s confidence in the client’s capacity to follow through with her commitment to the protocol and improve her life situation. It also sends a clear message that the client is responsible for her own recovery. Moreover, it allows the client to call in from wherever she happens to be at this point, rather than having to be at a designated place at the time of the call. Therefore, holding the client accountable for her role in the telephone contact should not be viewed as punitive, demeaning, or an infringement on her autonomy. On the other hand, busy counselors may have difficulty accommodating late calls. In our experience, clients do not call when they are scheduled to at least 50% of the time, and in those cases the counselor has to call in an attempt to locate the client and complete the scheduled session.

Therefore, we develop a call completion plan with the client during the orientation session. This process involves exploring the client’s access to telephones, her preference around calling in or being called, contingency plans for times when initial attempts to complete a call fail, and so forth. The client is advised that she and her counselor will revisit this issue frequently during the protocol, in case modifications are necessary. The goal is to do whatever it takes to increase the likelihood of completed calls.

Detailed outline: Telephone continuing care sessions

The overarching goal of the intervention is to help patients manage their addiction proactively by (a) avoiding and/or improving coping with high-risk situations (“people, places and things”) and emotional triggers for drug use and (b) developing a lifestyle rich with meaningful and rewarding activities unconnected or incompatible with substance use. Sessions are structured to include a review of the client’s progress and an opportunity to troubleshoot the week(s) ahead.

This section makes reference to the adaptive care protocol we have used in our research. In it, the counselor makes adjustments to the content, intensity, and modality of treatment based on considerations raised in the Progress Assessment Worksheet. Content refers to the topic areas covered in the call; to make the most of a 15-30 minute encounter it is essential to choose the most relevant content focus. Intensity refers to how often the sessions are held, and how long the sessions are. Our protocol specifies that the frequency of treatment may be increased if indicated, and then decreased again as the client’s situation and coping improve. In addition, session length may be increased in order to more fully process a problem or crisis. Finally, modality of treatment refers to whether contact is made over the phone or in person, and whether additional interventions are recommended in addition to, or in place of, continued monitoring and counseling.

The Progress Assessment items were selected based on prior research and clinical experience. They are divided into three sections, which will be called Status, Risk, and Protection.

The first section assesses broad “status” considerations that will impact on the overall conduct of the session. The remaining two sections of the Progress Assessment Worksheet address the client’s balance of relapse risk and pro-recovery lifestyle factors. Taken together, they will help guide the content of the session and assist the counselor in making recommendations regarding intensity and modality.

The first status item is substance use. If the client reports use of alcohol or drugs, find out when his most recent use was and obtain enough quantity/frequency information to make a clinical judgment about the content, modality, and intensity of treatment to be recommended. Be sure to show appreciation for the client’s honesty and persistence.

- If the use appears to have been a “slip” – that is, a brief episode, with relatively low intensity of use and limited negative consequences, followed by a return to abstinence, then the *content* focus will include debriefing of the episode and review of the client’s successful efforts to contain the slip before it became a full-blown relapse, all geared toward using the slip as a learning experience to guide further relapse prevention efforts. Anticipation of upcoming high-risk situations and recovery-oriented problem-solving should be informed by the recent slip. Increased *intensity* of phone contact may be offered to provide the client with additional support in managing similar situations more proactively. In most instances, a slip will not affect the *modality* of treatment. However, the client may be encouraged to talk about the slip in self-help meetings or IOP.

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- If the use appears to have been more extensive and/or intense, or if the client has not been able to return to stable abstinence, the *content* will again include debriefing of the initial relapse. More important, the focus will be on regaining abstinence. Both increased *intensity* of contact in the form of stepped-up phone calls and a change in *modality* in the form of an in-person evaluation session (and multi-session RP protocol) should be offered. Furthermore, clients who have left IOP may be encouraged to re-enter treatment.
- In the case of a severe relapse, the client may be encouraged to seek evaluation for detoxification or inpatient treatment to help him regain abstinence.
- Telephone monitoring and adaptive counseling is designed as an abstinence-oriented program, but not all clients will endorse a goal of complete abstinence from all substances. If a client continues limited substance use with no intention of stopping, session *content* will include efforts to encourage the client to reconsider how his substance use fits in with his recovery and overall personal goals. The general approach will be to “agree to disagree” with the client regarding treatment goals, while seeking permission to raise concerns about the client’s substance use as they become apparent to the counselor.

In our current research, we have included additional status items assessing involvement in Intensive Outpatient Treatment (IOP) and HIV risk behavior. The IOP status item is included because we have begun telephone continuing care as early as 2 weeks into treatment, with a goal of supporting treatment involvement. Therefore, it is essential for us to monitor during each call whether every client is still in treatment. The HIV risk item is included because one of the goals of our intervention is HIV risk reduction. Programs may substitute other relevant status items; for example, if a primary goal of a particular telephone continuing care program is to support employment, counselors may ask about employment status at each contact and only address HIV risk if it is a stated goal of an individual client.

The second section of the Progress Assessment Worksheet assesses items that are believed to be associated with greater risk of relapse. These include failure to follow through on medical and psychiatric self-care as indicated by attending scheduled appointments and taking medications, sustained depression, low self-efficacy for maintaining abstinence, thoughts and cravings to use, and exposure to high-risk situations or “people, places, and things” associated with drug use.

The third section of the Progress Assessment Worksheet assesses personal strengths, resources, and pro-recovery lifestyle behaviors that are believed to be associated with sustained abstinence from alcohol and drug use. These include drawing on a repertoire of coping skills to manage high risk situations and cravings, involvement in a sober social network, pursuit of personal goals that are incompatible with substance abuse, 12-Step meeting attendance and involvement, and contact with a sponsor or other helper outside the substance abuse/mental health treatment system.

Rather than yielding a single score, the Progress Assessment provides the opportunity to explore the balance between risk factors and protective factors or “recovery capital” and to look at

patterns over time. We recommend that counselors consider stepping up treatment when the balance of Risk and Protective scores shifts 4-5 points in the “wrong” direction. As the client progresses in recovery, he/she may be encouraged to achieve a balance of specifically recovery-oriented activities such as meetings, and broader personal goal activities such as building a sober social network and preparing to (re)enter the workforce.

Detailed instructions and sample scripts:

1. Acknowledge the client for the call, and orient her to the task at hand.

In order to cover everything in a brief call, you will need to move quickly to the Progress Assessment questions. Most clients respond favorably to the structure of the calls, and most counselors find that an extensive “check-in” at the start of the call is not necessary once they get used to the Progress Assessment. Here is an example of how the call might begin:

“Thanks for calling in on time. Are there any emergencies I should know about? OK, let’s get right into your worksheet. Do you have it with you now? Did you complete it prior to the call?”

Always acknowledge the client’s participation with enthusiasm. If a client didn’t call in on time, or has missed one or more scheduled calls, reinforce her for resuming calls, and mention that you will address scheduling issues later. If the client doesn’t have her materials on hand and can’t obtain them quickly, continue with Progress Assessment prompts. At end of session, prompt her to locate her workbook before the next call, and offer to mail another copy if it is lost. But don’t be overly concerned about it; clients vary in their usage of the workbook and printed forms. Some always follow along and others never open the book.

If there is an emergency, ask the client to describe it briefly. In most cases it will be enough to assure her that you will discuss it with her further after completing the Progress Assessment - as long as you really do follow through! If the client is very upset, it may be necessary to deal with the emergency situation before returning to the structure of the call. Even then, it may be possible to retain the “spirit” of the call by helping the client deal with the emergency without resorting to substance use.

2. Review Progress Assessment items

The current version of the Progress Assessment consists of three items on current status (e.g., substance use, HIV risk behaviors, attendance at treatment), five risk factor items, and five protective factor items. The assessment begins with questions about substance use and medical issues:

“How much of the time did you stay alcohol and drug free in the past week?”

“In the past week, have you had any medical appointments? Any changes in prescribed medication? How often have you taken your medication as prescribed?”

Continue through the Progress Assessment items in order, recording the client's responses. Ask for clarification as needed, but avoid getting bogged down in a detailed discussion of every item. Be alert to how the client's responses bear on her stated goals since the last session and to longer-term treatment goals. Is she showing progress over time toward a pro-recovery lifestyle? Is she becoming more proactive in avoiding and managing relapse risk situations?

In longer-term continuing care, review the client's list of high-risk situations, emotional triggers, and recovery-lifestyle items periodically (e.g., every 3 months) to determine if the items being monitored are still the most relevant, and to identify new items for monitoring if appropriate.

If the client is following along in her workbook, let her know how each item is scored so that she may record it if she wishes. Continually reinforce the client for sticking with the process and providing complete and accurate information, even when it's not all good news.

"Thanks for being so honest with me. I really appreciate your openness."

The Progress Assessment also provides guidance to therapists and counselors on adaptive modifications and case management efforts linked to each item in the assessment. For example, adaptive treatment for clients who report depression involves providing RP focused specifically on coping with depressed mood as a potential relapse trigger and CBT-informed advice for mild depression. Case management for depressed mood involves referral and linkage to mental health treatment, if the client is not already receiving such care.

3. Provide feedback on risk and protection levels

Based on hand or computer scoring of the Progress Assessment form, give the client feedback on her progress. The feedback should address both what the scores for risk and protective factors look like this week and how those scores may have changed from the last session. If possible, link scores to particular goals that the client may have had for the week. For example, the client may have had high craving scores at the last call, and as a goal for the upcoming week he was going to practice some new ways of coping with craving that were discussed on the call. If he did in fact practice the new coping behaviors and his craving score dropped, it is important to make that connection explicit:

"Your total risk score is 3 – you were in one high-risk situation and had a couple of urges to pick up. That's down from last time. Your protection score is 6, the same as last time. You used a lot of good coping skills to deal with the urges and you've continued to attend meetings and work toward your goals. Still not much as far as sober activities. Does that sound right to you?"

It can also be helpful to clients if they can receive feedback on longer term trends in their risk and protection scores, at least in certain circumstances.

“Although your risk factors score is only a little higher this week than last, when I look back over the past couple of months I see that the score has been climbing steadily for some time now. What do you make of that?”

“We saw that your participation in self-help meetings is down a lot this week, compared to last week. I think this is important to note, because your level of participation over the past two months has been really high each week. Maybe we’d better spend a little time on why you’ve abruptly cut way back on your meetings. Did anything happen?”

If you notice anything concerning in the progress assessment, such as big increases in risk factors or decreases in protection factors, it may be important to focus on those issues when working on problem solving and coping responses later in the call.

4. Review progress/goals since last call, if not already clear.

By the time you complete the Progress Assessment, you may have a good sense of how things are going from the client’s perspective. However, you may wish to get more elaboration before moving on. The purpose of engaging in a more detailed discussion of the past week is twofold: to reinforce successes and to begin to specify the nature of problems that may need to be solved. You may also be on the lookout for flagging motivation; don’t assume that successful goal completion is equal to being satisfied with how things are going.

If a high-risk situation or treatment-related problem was anticipated and planned for, engage the client in a detailed description of how he implemented his plan. What did he feel good about? What was more difficult? If the client didn’t complete his stated goal, what got in the way?

You spoke up in a meeting for the first time! That’s a big change for you. What was it like?

How did it feel to tell your brother not to bring beer to your house anymore?

You’ve been talking about taking the civil service exam for awhile now, but it seems like it’s been hard to follow through. What’s getting in the way?

5. Identify upcoming high-risk situations.

Ask the client to think ahead to the interval until the next phone call. What situations might she encounter that could lead to cravings or increased risk for relapse? Probe for likely triggers, and guide the client in considering how best to avoid relapse, if she does not spontaneously report a plan.

When will you be around your people, places, and things in the upcoming week?

You will be stepping down to a lower level of care at your treatment program. That’s a great milestone, but sometimes people find it is harder to stay alcohol and drug free when they have less support. What do you think?

May I share my concern about your plan? Most people in recovery find that watching sports at a bar isn’t the best idea, even if they aren’t planning on drinking. Can you think of anywhere else to watch the game?

The client may or may not identify any high risk situations. Clients aren't required to identify something each time, but they should become better at anticipating potential risky situations, and engaging in productive conversations about whether to avoid or cope with the situation. If a client who reports frequent triggers or cravings on the Progress Assessment has trouble anticipating high-risk situations, help her to see the connection between past difficult situations and the possibility that those same situations may arise in the foreseeable future.

You've had thoughts of using after seeing your mother the past few weeks. Are you going to see her this week? Do you think that might be a risky situation? How do you plan to handle it?

Over the course of treatment, one of your goals is to help the client go from believing that relapse is something that “just happens” in an unpredictable manner to having a clear understanding of his own set of risky situations, what he needs to do to be on the lookout for those situations, and what coping behaviors are likely to be effective when he encounters these situations.

6. Choose the focus for the remainder of the call.

At this point in the call, you will only have about 15 minutes for counseling before it is time to wrap up and schedule the next call. Use information from the Progress Assessment, the review of progress toward specific goals, and the information on potential upcoming high risk situations in your discussion with the client on what to focus your problem solving efforts on. Also, you can invite the client to include any other pressing matters he may see as having more of a bearing on his ability to remain alcohol and drug free. If adherence to the call schedule is a problem, this is the time to get it on the agenda. Most calls should focus on the short-to-intermediate term future, informed by the lessons of the past. For example:

“Your goals were to attend AA daily and talk with doctor about problems you've been having with your Zoloft. You made it to AA but you're still having trouble taking your meds. Bad moods are still a problem for you, and may be a high-risk situation for you in the upcoming week. Which of these things should we focus on? Is there something even more important for your recovery right now?”

Setting the agenda may or may not be an explicitly stated process, but the content focus of the call should clearly be related to the client's current clinical status as indicated by the Progress Assessment. See the attached grid for suggestions for matching session focus to client responses. In most cases, it will be pretty clear what the focus should be for the rest of the call—generally it will be whatever issue seems to pose the most serious risk for relapse or what is bothering the client the most. It is usually more effective to select a topic that the client agrees is important. Counselors will sometimes think an issue that the client is ignoring is in fact the most pressing problem, and may feel tempted to try to persuade the client to focus on it. This can certainly be done in longer face-to-face counseling sessions, but it is very difficult in relatively brief telephone sessions. Therefore, it is best to select an issue that the client agrees is critical.

7. Engage the client in brief problem-solving regarding target concern(s).

Once you have identified the focus of the call, engage the client in problem-solving. In general, we don't teach problem-solving skills in routine calls but rather model them as we guide the client through the steps of solving her particular problem. Encourage the client to generate a few solutions and select one for implementation. Provide information and advice as needed, but avoid telling the client what to do or getting into an unproductive exchange in which you offer helpful suggestions and the client rejects them. Avoid argumentation by responding reflectively to resistance and quickly getting back to the task at hand.

When solving the problem requires learning a new skill, such as anger management or assertive drink refusal, the counselor needs to decide how much to attempt to accomplish over the phone and how much of the skill-building needs to occur either in a focused face-to-face session or in another form of treatment altogether. In general, we encourage the counselor to do some basic coaching on simple ways in which the client can use the new skill in a particular situation, but not to attempt comprehensive teaching of a complex skill in which the client is particularly lacking. For example, you may model, and have the client rehearse, appropriate ways to refuse drinks or ask others not to bring alcohol into her home. If the same client then identifies improving assertiveness as a goal, you may consider working on a week-to-week basis to identify and plan for situations calling for assertive responding. Or, you may determine that the client has such significant personal barriers to assertive responding that she needs much more extensive and focused work specifically in that area. In that case, you would most likely make a referral. If failure to respond assertively to a specific interpersonal stressor is leading to increased risk for relapse, you may consider step-up to a limited number of face-to-face sessions focused on reducing relapse risk.

When motivation is flagging, this may be a signal that the client is minimizing the negative consequences of substance use and the benefits of abstinence. Review the information gathered in the initial face-to-face session to help identify reasons for staying alcohol and drug free – what are client's current thoughts on the topic? How can he best remind himself of the costs of use? Discuss the benefits of abstinence – and how the client can gain even more benefit from sober living. Consistent with Motivational Interviewing, avoid trying to persuade the client that abstinence will be more rewarding in the long run, but rather attempt to elicit the client's own personal motivation.

Most efforts to in problem solving will focus on helping the client plan for upcoming high risk situations. Some of the high risk situations that our clients frequently encounter include:

- Serious problems with a spouse or romantic partner. These problems can be acute, chronic, or both.
- Major social events, such as parties, weddings, birthdays, holidays, and so forth, where alcohol and drugs are often available
- A romantic partner, important friend, or family member whom the client wants to spend time with is an active user
- Neighborhoods with high drug use rates that the client either lives in or must pass through to get to work or school. The risk level goes up if the client also used to purchase alcohol or drugs in those neighborhoods
- Presence of a co-occurring psychiatric disorder, such as depression or PTSD.

One crucial issue to consider is whether the client should avoid such a situation, or attempt to more actively cope with it. To help determine this, it can be useful to ask three questions:

1. *Can the risky situation realistically be avoided?* Some situations simply cannot be avoided, even when the client is vulnerable to relapse.
2. *How stable is the client at this point?* Clients early in recovery and those who have recently relapsed may be better off avoiding the risky situation altogether. Conversely, those with more stable abstinence might be able to manage exposure to the risky situation, as long as they are armed with a coping plan.
3. *Are there potential advantages to experiencing rather than avoiding the situation?* Theoretically, successful active coping is supposed to lead to increases in self-efficacy, whereas avoidance coping is not. In addition, dealing successfully with a risky situation may lead to the elimination of that situation as a risk factor, which could remove a barrier to recovery.

There are many possible coping responses to risky situation. Research does not indicate whether any particular approach is better than another, although the relative effectiveness of responses may differ as a function of the three issues raised here, and the client's preferences, skills, and recovery resources. Even the same client may find that different approaches are more or less successful in different situations, or at different points in recovery. Some of the coping behaviors used by our clients include:

- Avoiding the risky situation
- Listing the benefits of staying abstinent and the costs—both immediate and longer-term—of drinking or drug use
- Bringing someone who does not drink or use drugs to the risky situation
- Lining up a self-help meeting or some other supportive group or activity to go to right after the risky situation
- Practicing what the client intends to do or say in the risky situation if offered a drink or drug
- Developing a plan to exit the risky situation if craving begins or stress levels get too high

Because there is a limited amount of time on each telephone contact, it is important to select one or two possible coping behaviors or responses and practice them during the call. Just talking about the behaviors will not be as effective as actually practicing them. For example, in a discussion about refusing an offer of a drink, a client may say, "I'll say something like 'I'm not drinking tonight.'" While that may be helpful, it would be better for the counselor and client to role play the situation, with the counselor playing the part of the person who offers the drink, and the client practicing an actual response. The counselor can up the ante somewhat by not taking no for an answer right away, and pushing the client harder to accept a drink.

There are also many opportunities for the counselor to help the client integrate her various structures and supports by shaping the client's goals in a way that models such integration:

connecting the client's identified interpersonal relationship goals to people at church or meetings or work, for example—

“Is that something you could talk with your pastor about?”

“What about asking your brother to go with you to _____?”

“When you meet with your sponsor this week, could you ask for feedback about this?”

Program and community resources will vary, but in general, we remind counselors not to try to provide comprehensive substance abuse, mental health, and social service care over the phone, but rather to make referrals as appropriate. Then, telephone contact can support the client in making best use of those resources.

8. Set one or more goals for interval before next call.

The client should be reassured that she doesn't have to come up with lengthy or complicated tasks and goals. In fact, simple and brief is better, as long as specifics are provided. Help clients choose goals and tasks that are concrete and “do-able.” It is better for the client to experience success at a modest goal than to fail at an ambitious one.

What do you intend to work on this week? What specifically will you do?

Are you sure that going to a meeting every day is realistic for you? You have been getting to one each week. How about setting a goal of really going to 2 or 3 this week?

OK, you said you'll get to three NA meetings this week. The more specific you can be about it the more likely you are to follow through, so let's see what we can figure out right now. You said you want to get one in before the weekend – can you get to one Friday after work? And which other meetings will you attend?

9. Schedule the next phone call

Schedule the next phone call. If compliance has been a problem, make sure the client agrees that the designated time will work for them. If necessary, engage in brief problem-solving regarding compliance with phone calls, including having Progress Assessment form ready.

Adaptive Algorithms for Stepped Care

There are several possible approaches to devising an adaptive algorithm to adjust level of care on the basis of the client's progress or the lack thereof. At one extreme, counselors can be told to use their own clinical judgment, and to recommend changes when they think it is advisable. Or, counselors can be given general guidelines for stepped care, and urged to make use of them as they see fit. We have tried to provide more formal algorithms to counselors, which make use of data collected in the risk assessment at the beginning of each call.

Our first attempt ended up being extremely complicated, as we went to great pains to anticipate all the ways that clients might be categorized as at moderate or high risk. Clients who

reported any recent use or extreme concern about their ability to remain abstinent for the next week were automatically placed in the “high risk” category regardless of their answers to the other questions in the risk assessment. However, clients could also be placed in the high risk category by virtue of at least moderately concerning response on most of the other risk items, coupled with low scores on the protective factors. Low risk, on the other hand, required low scores on all risk items plus at least some evidence of pro-recovery behaviors and activities. Clients who did not end up in either high or low risk categories were placed by default in the moderate risk category. This system did seem to have predictive validity, as evidenced by the data presented in the last chapter. However, it was difficult to use, and even harder to explain to counselors and clients!

Therefore, in our current study with cocaine clients, we are trying a simpler and more straightforward algorithm, which is keyed on changes in the balance between risk and protective scores, and also takes into account current status in IOP or OP treatment that the client may still be participating in:

1. If the client shows an increase in risk factors score and/or decrease in protective factors score that combines to an overall ***shift of 4-5 points*** in the "wrong" direction, the clinician should attempt to address it in a more comprehensive fashion during the call with the client. It would be appropriate to have a longer-than-usual call in order to address the recent change and help the client develop a plan to decrease risk-related behaviors and/or increase protective behaviors. If the client can agree to a reasonable plan and is confident in his/her ability to remain abstinent, then the next call will be scheduled as usual.
2. If the client can't agree to a reasonable plan or is very concerned about using alcohol or drugs, or if the worrisome negative overall shift in risk factors/protective factors scores is maintained at the next call, then the counselor should:
 - a. Encourage client to make use of treatment and commence “watchful waiting,” if the client is still meaningfully engaged in IOP/OP.
 - b. Increase frequency of contacts immediately, if client is not engaged in IOP/OP.
3. The usual starting point for increased frequency of contacts would be a scheduled call at half the usual interval (e.g., if the client has been calling every 2 weeks, offer a call at 1 week) with the availability of emergency calls sooner if needed. If the client is not confident she can remain alcohol and drug free for that time period, then the counselor should decrease the interval by half again and consider a face-to-face session (see below). If the client can follow through on her plans, then the counselor can continue with increased call frequency until the risk—protection balance shifts back to a more healthy ratio.
4. The counselor should offer a face-to-face evaluation session if:
 - a. The client expresses low confidence in ability to remain abstinent for at least 1 week
 - b. The client has difficulty following through on plans to lower risk/increase protection with phone contact

- c. The nature of the client's problem requires case management that is too cumbersome to do over the phone

Further Therapeutic Options on the Stepped Care Ladder

If a face-to-face evaluation session raises further alarm bells, or if the clinically significant shift in the balance of risk and protective factors does not reverse itself relatively quickly, our algorithm calls for the implementation of further face-to-face treatment. We offer individual CBT/RP sessions (1-2 per week) for up to eight weeks to clients in this situation. Or, we will help the client re-engage with a local community IOP or OP program, if the client prefers that. In cases where the client has been engaged in a considerable amount of heavy drinking over an extended period, the possible need for formal detoxification also should be considered. Options for face-to-face, clinic-based stepped care are discussed further below.

Lateral Adaptations and Case Management Referrals

In addition to “vertical” moves via stepped care, the protocol provides guidance on when to consider what might be called “lateral” moves. In these situations, the client stays at the same level and frequency of contact, but the content of the intervention is modified. For example, decreases in self-efficacy might be addressed by rehearsing coping responses during the call and suggesting further confidence building exercises between calls. Similarly, increases in depressive symptoms could be addressed by using CBT techniques that challenge cognitions and attributions associated with depression. These procedures qualify as adaptive treatment, as long as “if—then” statements are used to link specific scores on assessment items or measures to specific modifications in treatment. Recommendations for lateral adaptations and case management efforts are illustrated in the items from the Progress Assessment.

Face-to-Face Evaluation Sessions

We recommend that “step-up” to face-to-face contact be provided when the client reports relapse or if the client’s balance of Risk and Protective factors as measured by the Progress Assessment remains problematic even after increasing the frequency of phone contact. It may also be provided if the client re-engages after at least a month of no contact with the counselor. In most cases, a single session is scheduled within a week after the phone call in which the client reports use or heightened relapse risk, and depending on the outcome of the first session, a second session may be scheduled about 1 week later.

Step-up to in-person sessions may be intended to accomplish one of several goals. In some cases, the client seems to be struggling in response to a particularly difficult set of stresses or risky situations. In those cases, expanded problem-solving efforts are usually initiated in longer and/or more frequent phone calls, and step-up to face-to-face sessions may provide an extra measure of support. In other cases, the client may come into the office for a session devoted to more intensive case management than can be done over the phone. For example, the counselor may assist the client in a computer search for nearby mental health treatment facilities and allow the client to use his phone to call for an appointment. In either of these cases, the structure and content of the session remains similar to that of a telephone-based session.

In some cases, it is necessary to take a step back from the usual routine and review the course of treatment as a whole, shoring up motivation and commitment to a new set of goals. These sessions are referred to as “evaluation” sessions, and differ in style and content from the usual continuing care session.

By the time an in-person evaluation session is scheduled, you may have spent several phone calls “putting out fires” with a client who is experiencing one or more crises, or who is showing minimal compliance or flagging motivation. If the client has been participating in phone calls, yet continues to do poorly, it is possible that the focus of the sessions and between-session goals has strayed off target. Therefore, rather than continuing to do more of the same, the goal of the face-to-face evaluation session is to take a step back from the immediate situation and get a broader assessment of what is going on.

The evaluation session will include a detailed debriefing of any relapse episodes as well as a review of the client’s ability to cope with high-risk situations for relapse. There will also be the opportunity to address the client’s motivation and commitment to abstinence from alcohol and drug use.

In some cases, it will not be possible to conduct this session in a “face-to-face” format, due to transportation problems, the client’s parenting or job responsibilities, or some other reason(s). In these situations, the session could be done over the telephone. However, it is important to convey to the client that the session will be longer than your standard telephone sessions (i.e., more like one hour), and that the client will need to be in a quiet room where he will be able to focus and talk freely.

Detailed outline:

1. Set the agenda.

Affirm the client for taking the step of coming in to address his current problems, and set the agenda for the session. Include time for discussion of immediate concerns, but unless the client is in crisis, spend most of the time on a bigger-picture review of treatment progress. If the client is experiencing a crisis, or needs substantial case management, attend to those needs right away, and consider rescheduling the evaluation session.

2. Debrief recent substance use.

Review recent episodes of alcohol and/or drug use in terms of the functional analysis or behavior chain. Identify, for each episode, the environmental trigger and thoughts and feelings that preceded picking up; the client's coping efforts, if any, and substance use behavior; and the short- and longer-term consequences of use. Identify patterns that can inform a return to abstinence. If the client has had a severe relapse, and poor social support and/or withdrawal symptoms are a major factor in continued use, then referral to inpatient treatment may be in order.

3. Assess motivation.

It may be clear early in the session that the client is highly motivated to return to abstinence but lacks skills and/or resources to do so. In that case, it makes sense to offer additional treatment or referral to respond to the skill and/or resource deficit. However, low motivation is also often a barrier to resuming abstinence or making progress toward reducing relapse risk. Clients may have mixed feelings about giving up substances or about making the extensive lifestyle changes associated with successful recovery. Therefore, the face-to-face evaluation session includes formal assessment of motivation.

Usually at this juncture it is most worthwhile to ask about motivation to regain or maintain abstinence from substances. In some cases it may be more relevant to ask about following through with specific actions, particularly when the client has not followed through on referral to community resources to address a stated need.

- Show the importance ruler to the client.
 - Ask, *“using this scale, how important is it to you right now to stay drug-free/stop drinking alcohol/get treatment for depression/etc...?”*
 - If the client gives a number, ask, *“why are you at [that number] and not zero?”*
 - If the client points to the scale, ask, *“why are you here [pointing where the client pointed], and not here [pointing to zero]?”*

Listen carefully and with interest to the client's response with an attitude of seeking to understand the client's existing level of motivation. Briefly reflect back what you hear, and ask for elaboration of vague or general statements. When you think you understand

the client, offer a summary and ask if you have it right. If the client adds more, reflect the new information.

Then ask, “*what would it take to move you from [the number the client chose] up to [a number 2 or 3 points higher] in importance?*”

Again, listen carefully and reflect what you hear. Ask for clarification or elaboration briefly, if needed, in order to understand, and summarize.

- Then, show the confidence ruler to the client.
Ask, “*If you did decide to... then, how confident are you right now that you would succeed?*”
 - If the client gives a number, ask, “*why are you at [that number] and not zero?*”
 - If the client points to the scale, ask, “*why are you here [pointing where the client pointed], and not here [pointing to zero]?*”

Listen carefully and with interest to the client’s response with an attitude of seeking to understand the client’s existing level of self-efficacy for making the desired change. You will hear some change talk, mostly including ability and commitment to change but possibly also more desire, reasons, and need for change. Briefly reflect back what you hear, and ask for elaboration of vague or general statements. When you think you understand the client, offer a summary and ask if you have it right. If the client adds more, reflect the new information.

Then ask, “*what would it take to move you from [the number the client chose] up to [a number 2 or 3 points higher] in confidence?*”

Again, listen carefully and reflect what you hear. Ask for clarification or elaboration briefly, if needed, in order to understand, and summarize.

4. Choose the focus of the session, based on your assessment.

If importance is low, or if the client states high importance numbers, but can’t elaborate, then motivational barriers, more than logistical or skills deficits, may be preventing progress. Suggested strategies to address low motivation include:

- Acknowledge the difficulty of following through on action plans when feeling low motivation.
- Use the client’s response to “what would it take to increase importance” to find hooks for increasing motivation. Provide information and/or personal feedback if applicable.
- Review the client’s responses to motivation-related questions at the start of treatment. How does the client feel now about what he stated then as costs of using and benefits of abstinence?
- Continue to use a motivational interviewing approach of gentle inquiry, reinforcing change talk, and rolling with resistance.

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- Encourage the client to commit to action consistent with his readiness to change, even if the only action the client is willing to make is to continue meeting with you.

If the client states moderate to high importance, i.e., motivation, for change, but reports low confidence in his ability to follow through, then, more traditional cognitive-behavioral skill training and/or case management may help to overcome barriers. Don't attempt to do everything in a single session; the purpose of the face-to-face session is to determine the course of treatment, not solve all of the client's presenting problems.

- Explore past and present efforts at change. What has worked in the past? What is different now?
- Use client's response to "what would it take to increase confidence" to guide problem-solving efforts.
- Determine whether the client needs additional support through a temporary difficult situation or whether the client needs more structured help with developing basic relapse prevention skills. In the first case, stepped-up intensity of contact, with the usual call structure may be in order. In the second case, step-up to an 8-10 session relapse prevention protocol may be recommended. In either case, telephone continuing care may be supplemented with increased 12-step meeting attendance and/or return to group treatment.

Use adaptive protocol to determine next course of action – return to phone calling, schedule additional session, recommend a course of RP, etc.

Face-to-Face Treatment Options When Stepped Care is Needed

In our adaptive protocols, clients who require more intensive treatment than can be provided on the telephone generally receive individual CBT/RP sessions. However, it is also possible to step clients back up to standard outpatient or IOP groups, if that option is more readily available, or if the client would prefer that. We usually recommend 1-2 sessions per week for 4-12 weeks, depending on the severity of risk level and the client's progress to date in the protocol. If individual treatment is an option and is preferred by the client, the following approaches are recommended:

Cognitive Behavioral Therapy/Relapse Prevention (CBT/RP)

There are a number of versions of CBT/RP that have demonstrated efficacy and are manualized and readily available, including:

- The Carroll (1998) NIDA CBT manual
- The Monti et al. (1989) coping skills treatment manual
- The Combined Behavioral Intervention (CBI) manual (Miller et al., 2004)

These manuals all share the same basic set of CBT components and many of the same procedures and exercises. These include

- Functional analysis of the client's relapse episodes
- Methods for coping with craving

Telephone Care in Rural Smokers with Substance Dependence

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- Increasing motivation and commitment to abstinence
- Assertiveness and drink/drug refusal skills
- Improving decision making
- Dealing with biased and distorted thinking
- Coping and problem solving

Individual Drug Counseling

Mercer and Woody (1999) developed a treatment manual that standardized the approach to counseling that is typically taken in community based programs, for use in a NIDA funded multi-site cocaine treatment study. This approach, which was referred to as Individual Drug Counseling, combines didactic material; elements of AA and other self-help programs; monitoring of substance use, craving, relapse triggers and other high-risk situations; other relapse prevention elements; management of free time; and spirituality. In the treatment study for which this intervention was developed, patients who received the individual drug counseling intervention plus group counseling had better outcomes than those who received cognitive therapy plus group counseling, a psychoanalytically oriented therapy plus group counseling, or group counseling only (Crits-Christoph et al., 1999).

Social Support Based Interventions

Twelve Step Facilitation. TSF is an individual counseling approach that was designed to help patients engage more fully with 12-step based self-help programs (Nowinski, Baker, & Carroll, 1995). TSF takes the patient through the first five steps of 12-step programs, which involve acceptance of the self as an addict, surrender to a higher power, and completion of a moral inventory. Other topics include an examination of family history of substance use, learning about situations that lead to substance use, and sober living. This intervention was developed for Project MATCH, and was found to be at least as effective as CBT and MET.

Network Support. Litt and colleagues developed a treatment intervention designed to help patients change their social networks to become more supportive of abstinence. Because AA was the most readily available potential source of support for abstinence, the intervention made use of components from the TSF Manual. Making new acquaintances and engaging in enjoyable social activities at AA or other social networks were stressed, rather than other AA components like the higher power and powerlessness. For those participants who are not interested in AA, the intervention focused on increasing other forms of social support for abstinence.

Network Support was evaluated in a research study in which participants were randomized to a case management comparison condition (CM), network support (NS), or network support plus incentives for abstinence (NS+ContM). Data from the one year follow-up indicated that both network support conditions produced better alcohol use outcomes than the case management intervention. Moreover, NS led to greater increases in AA attendance and behavioral and attitudinal support for abstinence. Interestingly, the incentives did not improve outcome over network support alone, and in some cases appeared to actually decrease the effectiveness of NS (Litt, Kadden, Kabela-Cormier, & Petry, 2007).

If none of these individual treatment approaches is a viable option, standard outpatient treatment or IOP—both of which rely on group counseling—can also be used for patients who are not doing well in the telephone program.

Additional Suggestions

Documentation

The therapist should document all contacts with the client and all attempts to reach the client. The counselor is responsible for keeping comprehensive records on each call, including a progress note and data regarding client adherence to the phone calling process. Counselors should note whether step-up care is recommended and whether client follows through with the recommendation. This information can also be collected on the Risk Assessment Worksheet. Referrals to outside services should also be documented, along with information about whether the client followed up on the referral.

Maximizing Adherence to Telephone Continuing Care

As was discussed earlier, it is crucial for the counselor and client to arrive at a calling plan during the orientation, particularly with regard to who should call whom, and when. When a call is missed (e.g., either client does not call in or counselor calls and there is no answer), it is the counselor's responsibility to try to reach the client, determine the reason for the missed appointment, and re-engage the client in regular phone session attendance. The counselor should make active efforts to re-engage a missing client for up to a month after a missed session, including phone calls to the client, phone calls to support people, and letters to the client. After a month from the last contact, the client is considered inactive in treatment but may return at any point during the treatment window (this will of course vary, depending on staffing and other resources).

Additional phone calls at various times of day in an attempt to catch the client at home are strongly encouraged. The idea is to engage in active, caring efforts to contact a missing client that stop short of harassment of a client who does not wish to be found or overburdening the client's significant others. The following is a suggested sequence of retention efforts:

Client Does Not Keep Telephone Appointment

If the client is supposed to call in, and has not called within 10 minutes of the scheduled time, the counselor should call the client. If the client can be reached directly, the phone session should be done at that time if possible. The counselor should inquire about the missed call. If the client has a plausible explanation, the counselor can simply review that the calls are the client's responsibility (whether the client is making or receiving them) and emphasize the importance of keeping the next appointment. Even compliant clients are going to miss sessions occasionally, particularly relatively brief telephone sessions. Therefore, if the client sounds "normal" to the counselor on the telephone, participates appropriately in the session and seems to be following through with what he needs to do, his explanation that "I got busy and forgot the call" is likely to be true. In a case like this, the missed call may not be cause for concern—as long as this is not one in a series of missed appointments.

If the counselor does not contact the client, a message should be left (if possible) asking for the client to call. If the client calls back within one business day and has a plausible explanation for the missed appointment, the phone session should be conducted at that time if possible. The counselor should remind the client of how important it will be to keep the next phone session, and problem-solving regarding compliance should be done if necessary.

Client Does Not Respond to Counselor's Message

If the client has not called back within one business day of counselor's first message, the counselor should call the client again and leave another message stressing the importance of the client calling back. If the client calls back within a week of the missed call with a plausible explanation for missed appointment, the counselor should conduct the phone session at that time and review compliance issues. Reasons for not calling back right away should be addressed, and solutions to these barriers should be identified. This is particularly true when the problem is lack of access to a telephone. It is our experience that a significant proportion of clients who begin treatment with a cell phone will either no longer have an active cell phone within a month or so, or will have a new cell phone number. It is better to anticipate these problems than to have to react to them after they have happened.

After a week, the counselor should call the client again, and leave another message if possible. If the client does not call back within one day, the counselor should call one of the client's support persons, if applicable. If the client calls back within another week (i.e., 2 weeks after missed appointment), the counselor should evaluate current status to determine whether a face-to-face session is needed to get the continuing care protocol back on track. The evaluation should review goals and importance of phone counseling, counseling agreements, and problem-solving to maximize compliance. The counselor should evaluate whether co-occurring problems, such as psychiatric symptoms, childcare issues, other problems with children, basic needs, and so forth, are contributing to poor compliance, and provide referrals if needed.

Client Does Not Respond Within Two Weeks of Missed Appointment

If there is no response by the two week point, the counselor should send a letter requesting that client call back as soon as possible. The letter should emphasize the counselor's concern for the client and that the client is welcome back to treatment regardless of what has been going on in the meantime. If the client calls back, the counselor should evaluate the client's current status according to the risk assessment to determine whether a face-to-face session is desired to get counseling back on track. As was discussed above, the counselor should review goals and importance of phone counseling, counseling agreements, problem-solving to maximize compliance, and co-occurring problems. The compliance issues may be seen as a "red flag" warranting an increased level of care or an in-person evaluation session before returning to the regular phone schedule.

If the client does not respond within 4 weeks of missed appointment, the counselor should call the client again (and support person if applicable). If there is no response, a second letter should be sent letting the client know that the counselor will no longer actively seek him out at this time but that he is still eligible to participate in treatment if he decides to do so at a later date (in our studies, this "open door" is extended for up to 24 months).

Contact people nominated by the client can be quite helpful in locating the client when he or she has stopped making telephone calls. Counselors should always thank these people for their help! Repeated calls searching for the client may be annoying or intrusive to the contact person. When trying to reach a client who has missed an appointment, counselors should ask the contact person's permission to call them again after a certain interval has elapsed if the client has not called.

Client "Disappears" and Then "Reappears"

The counselor should talk with the client on the telephone about the client's absence and non-response to phone messages and letters. The counselor then should set up a brief (30-45 minutes) face-to-face meeting with the client to review goals, agreements, and so forth, and also to take a urine drug screen (UDS) and breath test. If client denies use of drugs/alcohol, but complies with biological tests, the time of next telephone appointment is reviewed with emphasis on the importance of keeping the appointment.

Addressing Problems with Compliance vs. Problems with Substance Use

It can sometimes be helpful to consider different modifications to treatment, depending on whether the client is having problems with substance use, compliance, or both. In that regard, there are four possible categories that clients will fall into when they participate in continuing care:

- Client is doing well with regard to substance use, and is exhibiting good compliance with treatment.
- Client is doing well with regard to substance use, but is beginning to have compliance problems with one or more aspects of the protocol.
- Client is using alcohol or drugs, but is still exhibiting good compliance with treatment.
- Client is using alcohol or drugs, and is having compliance problems with treatment.

Below, we provide basic outlines for how each of these situations should be dealt with in telephone sessions.

Doing Well with Good Compliance

In this situation, stepped up care is usually not needed, and the status quo can be maintained. In fact, when clients maintain this status for an extended period, it might make sense to talk about decreasing the level of care somewhat. The two crucial tasks for the counselors are:

- Demonstrate a continued high degree of interest in how the client is doing
- Provide much positive reinforcement for a job well done.

Doing well but with Slipping Compliance

Clients in this position fall into two groups, those who are really doing well and are feeling less of a need (or diminished time) for treatment, and those who are heading for trouble. The counselor should be able to determine which group such a client fits into by taking stock of his current status in a number of areas, and listening carefully to his explanations for not attending treatment sessions as consistently as before. For example, a client who is actively involved in self-help, has a sponsor, and talks excitedly about how well work is going is likely in the "really doing well" group. Conversely, a client who is not strongly connected to a pro-

recovery organization, or reports feeling bored, lonely, or under-appreciated at work, is more cause for concern when compliance is also slipping.

- For clients in the “really doing well group,” the counselor should provide considerable positive feedback, but also inquire about reasons for lack of compliance. If explanation given makes sense—“I’m going to AA meetings four nights a week, and it’s just hard for me to get to my counseling sessions at the clinic or make this telephone call since I want to spend some evenings with my kids”—further discussion about how to adjust treatment is warranted. In such a case, the counselor might say:

“What you are telling me sounds reasonable. Perhaps we should change your treatment plan to cut back on outpatient sessions, but stay with the weekly telephone calls. As long as your compliance with this new plan is good, we can stay at that level—unless we decide together that you need more support, or you start to miss sessions or telephone calls.”

- For clients in the “cause for concern” group, the counselor should once again provide positive feedback, but should directly bring up the behaviors that are worrisome. For example:

“Over and over, we’ve seen that when clients are not feeling excited about and satisfied with their life during recovery, they are vulnerable to relapse. You’ve told me that you’re lonely and feeling depressed, and the job that you were feeling really good about at first is turning out to be a real disappointment. So, even though you’re maintaining abstinence and still going to work, I’m worried that you’re headed for trouble. More evidence of that is that you have begun missing some of our telephone calls, and your attendance at AA has clearly slipped. What do you think about all this? Do you have any concerns about possible relapse? Do you think you should be making any changes now to your recovery plan?”

Having Problems but with Good Compliance

These clients are likely to respond favorably to changes in treatment given that they are already compliant. Still, it is important for the counselor to carefully discuss her rationale for wanting to change the client’s treatment in some way—most likely by adding additional telephone calls, or possibly face-to-face counseling sessions:

“You’ve really been very consistent about making your telephone calls. And, it looks like your relationship with your husband has improved. However, you’ve also told me that you’ve started drinking on the weekends, and last weekend you got pretty drunk and it scared you. How does weekend drinking fit with the goal of abstinence that you expressed when you started treatment? It sounds like you now believe that it is safe to drink on the weekends if you can keep it under control. What about your prior attempts to drink or use drugs in a controlled fashion? How did those work out? Why should it be any different this time?”

At this point, hopefully the client will come to the conclusion that any substance use is dangerous, and that she needs to take action to get back to stable abstinence. It is

best if she can come up with new goals regarding her behavior. However, if she is having trouble with this and is open to recommendations, the case counselor can make suggestions.

If it is OK with you, I can offer a few suggestions. For example, it sounds like we need to make some changes to your treatment, to make sure that the drinking stops now before it gets worse. I think that it might be time for you to start attending relapse prevention sessions here at the clinic—what do you think?”

The specific changes to recommend with a compliant client will depend on the nature of the problem—how severe the substance abuse or co-occurring problems have become, and so forth—and the client’s life circumstances and preferences. With compliant clients, one can be tempted to “pile on” additional treatment, since they are not as likely to outright refuse to attend. However, too much additional treatment can turn a compliant client into a resistant one, so the costs and benefits of more treatment should be considered carefully. Approaching the situation as a problem that counselor and the client need to address together may increase the chance that any changes that the two decide on will actually be made.

Having Problems and Poor Compliance

These clients are going to be the most difficult to deal with. The fact that they are already having problems with compliance suggests that any additional treatment the counselor recommends will lead to more compliance problems. Here are the factors to consider before formulating a change in treatment:

- Evaluate how serious the substance use problem is at this point.
- Determine why the client isn’t being compliant.
- Evaluate whether better compliance with current level of care is likely to take care of the problem, or if increase in frequency or intensity of treatment is warranted, or a switch to an entirely different therapeutic approach.
- Evaluate whether co-occurring problems, such as psychiatric symptoms, relationship problems, childcare issues, other problems with children, basic needs, and so forth, are contributing to the substance use problems or poor compliance.

If the therapist thinks that the main problem is poor compliance, her first task is to figure out a way to get the client back in treatment. It may make more sense to first attempt to get the client to attend the various sessions that were part of the treatment plan prior to compliance problems, rather than add additional sessions. However, the client may have had objections to certain aspects of that prior treatment plan, and so a substitution of some sort may be warranted. It is possible the client may even be willing to participate in treatment of greater intensity, if the therapist can assist her in removing whatever barriers are preventing better compliance. The important point is the therapist should actively reach out to the client. Obviously, the more time that passes while the client is having problems and not being compliant with treatment, the less the chances are of achieving a good outcome.

Other problems will arise that have not resulted in relapse but pose a threat to continued sobriety. Such problems might include: change in health status, loss of job, loss of a relationship/significant person, poor compliance with medications, and so forth. These will

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potentially require increased counselor contact with client and further case management with additional referrals. In situations such as these, procedures should be followed to help the client develop discrepancy between expressed goals and current behaviors. Moreover, the client should always be encouraged to state what she thinks she should do or what sort of support she would find helpful. If the plan developed by the client sounds good to the counselor, methods for implementing it can be discussed. If the plan does not seem adequate to the counselor, suggestions for changes should be made. These might include offering an option of accepting increased structure to help the client get through this “rocky time” with the least additional stress. Any of the above options might be offered, including a brief return to more intensive treatment (i.e., IOP or residential) for stabilization or increased face-to-face contact with the therapist. The goal of the counselor in such situations is to help the client get through the crisis with as little damage as possible and to facilitate client’s connection to and utilization of established resources/structure.

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Smoking Cessation in Outpatient Alcohol Treatment

*Kathleen M. Grant, MD, †Jay H. Northrup, MA, ‡Sangeeta Agrawal, MS,
*Denise M. Olsen, MS, §Carolyn McIvor, MD, and *‡Debra J. Romberger, MD

Abstract

Objective: This study examined the effect of a smoking cessation intervention on alcohol abstinence. Veterans ($n = 40$) in an outpatient substance abuse treatment program were randomly assigned to intervention and control groups.

Methods: The intervention consisted of 5 weekly education and group therapy sessions. A repeated measure design was used to compare outcome measures of smoking cessation and sobriety from alcohol in 2 groups (control, intervention) at baseline, 2 weeks, 1 month, 6 months, and 12 months.

Results: There was a trend in the direction of greater alcohol use in the intervention group, but differences were not statistically significant at 6 and 12 months. Reported smoking abstinence rates were similar through 6-month follow-up. However, a statistically significant proportion of control participants reported being off cigarettes for at least 24 hours at 6-months.

Conclusion: These preliminary data suggest additional studies are needed to determine the effect of smoking cessation on alcohol abstinence.

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The treatment of cigarette smoking in alcoholics remains problematic. While cigarette use has decreased to 25% in the general population, alcoholics are notable for their lack of response to public health and other measures to diminish cigarette use. Approximately 80% of alcohol dependent patients smoke cigarettes.^{1,2} Heavy cigarette use is predictive of unrecognized alcohol abuse/dependence.³ The concomitant use of tobacco and alcohol results in an increased incidence of head and neck cancers, cirrhosis, and pancreatitis.⁴ Tobacco, not alcohol, has been shown to be the leading cause of death among previously treated alcohol dependent patients.⁵

In the alcohol treatment community there has been a reluctance to address nicotine use in the same way cocaine or opiate use is addressed. The belief that discontinuing both alcohol and nicotine use is "too much" and will result in relapse to alcohol is commonly perpetuated in alcohol treatment programs. The personnel of alcohol treatment programs are frequently recovering alcoholics who continue to smoke. Treatment personnel who continue to

smoke are one-half to one-third as likely to provide counseling on smoking cessation as those personnel who have never smoked.⁶

Recent studies have begun to explore the relationship between alcohol treatment and cigarette smoking cessation. It has been demonstrated that long-term (10-year) abstinence from alcohol and smoking are highly correlated.⁷ In inpatient substance abuse treatment programs smoking bans with and without counseling and nicotine replacement have been evaluated.⁸⁻¹⁰ Bobo et al showed that simultaneous treatment of alcohol and tobacco in residential settings did not jeopardize the participants' recovery from alcohol.¹¹ These studies suggest that smoking cessation efforts in inpatient and residential settings do not diminish the efficacy of alcohol treatment and lead to an overall health benefit in terms of smoking cessation.

Our study examined the feasibility and efficacy of an intervention for smoking cessation in outpatients who were in alcohol treatment. The purpose was to determine if a smoking cessation intervention in veterans undergoing outpatient alcohol treatment would be safe and not detrimental to alcohol treatment.

Materials and Methods

The Omaha Veterans Administration (VA) Medical Center Substance Abuse Treatment Center (SATC) is a comprehensive drug/alcohol evaluation and treatment program. At the time of this study it had both inpatient (approximately 200 admissions per year) and outpatient

From the *Department of Veterans Affairs Medical Center, Omaha, Nebraska; †Wayne State University School of Medicine, Detroit, Michigan; ‡University of Nebraska Medical Center, Omaha, Nebraska; and §Omaha Gastroenterology Consultants PC, Omaha, Nebraska.

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Corresponding author: Kathleen Grant, MD, Medical Director, SATC, VA/Nebraska/Western Iowa Health Care System/Omaha Division, 4101 Woolworth Avenue, Omaha, NE 68105. E-mail: Kathleen.Grant2@med.va.gov.

programs. Patients enrolled in the study had either inpatient treatment followed by outpatient treatment of 6–12 months or were directly admitted to outpatient treatment and underwent no inpatient treatment of their alcoholism. Patients enrolling in the outpatient program with a diagnosis of alcohol abuse or dependence were evaluated for study participation.

Alcoholics in outpatient treatment were recruited since prior studies had evaluated smoking cessation efforts in inpatient or residential alcohol programs. Eligibility criteria included meeting Diagnostic and Statistical Manual of Mental Disorders–IV criteria for alcohol abuse/dependence, smoking at least 10 cigarettes per day,

and willingness to provide names and addresses of at least 2 collateral informants. Subjects with a diagnosis of schizophrenia were excluded from the study. Study subjects signed an informed consent and followed a study protocol approved by the Omaha VA Medical Center Human Studies Subcommittee.

Subjects were randomly assigned to the control and intervention groups. All study participants completed a baseline questionnaire addressing their drinking and smoking histories, Addiction Severity Index (ASI), Fagerström Tolerance Test, and Center for Epidemiologic Studies Depression Scale (CES-D). The intervention consisted of 5 weekly education and group therapy sessions and carbon

Table 1. Baseline characteristics

Variable	Control	Intervention
Total (N)	20	20
Male (%)	85 (17/20)	100 (20/20)
Age (mean)	44	45
Ethnicity (%)		
Caucasian	65 (13/20)	65 (13/20)
Hispanic	0	5 (1/20)
Black (not Hispanic)	35 (7/20)	30 (6/20)
Years smoked cigarettes (%)		
11 to 20 years	25 (5/20)	30 (6/20)
21 to 30 years	45 (9/20)	50 (10/20)
31 or more years	30 (6/20)	20 (4/20)
Cigarettes smoked per day (%)		
At least 10	5 (1/20)	5 (1/20)
11 to 20	30 (6/20)	45 (9/20)
21 to 30	45 (9/20)	35 (7/20)
31 or more	20 (4/20)	15 (3/20)
Fagerström score (%)		
0–2 Very low	5 (1/20)	15 (3/20)
3–4 Low	25 (5/20)	10 (2/20)
5 Medium	15 (3/20)	15 (3/20)
6–7 High	25 (5/20)	45 (9/20)
8–10 Very high	30 (6/20)	15 (3/20)
Prior substance abuse treatment (%)	90 (18/20)	80 (16/20)
Quit smoking attempts (%)		
Never	21.1 (4/19)	40 (8/20)
1	31.6 (6/19)	15 (3/20)
2	10.5 (2/19)	5 (1/20)
3	5.3 (1/19)	5 (1/20)
4	5.3 (1/19)	10 (2/20)
5	15.8 (3/19)	10 (2/20)
10 or more	10.5 (2/19)	15 (3/20)
ASI (alcohol composite score; M ± SD)	0.525 (0.287)	0.453 (0.261)

Table 2. Relapse to alcohol drinking

Variable	Control	Intervention
Had even one drink (%)		
2 weeks	6.3 (1/16)	13.3 (2/15)
1 month	17.6 (3/17)	38.5 (5/13)
6 months	35.3 (6/17)	38.5 (5/13)
12 months	43.8 (7/16)	53.8 (7/13)
Had more than one drink (%)		
2 weeks	0.0 (0/17)	6.7 (1/15)
*1 month	0.0 (0/16)	33.3 (4/12)
6 months	13.3 (2/15)	33.3 (4/12)
12 months	40.0 (6/15)	53.8 (7/13)
Had several drinks on one occasion (%)		
2 weeks	0.0 (0/17)	6.7 (1/16)
1 month	6.3 (1/16)	25.0 (3/12)
6 months	3.3 (2/15)	27.3 (3/11)
12 months	26.7 (4/15)	50.0 (6/12)
Drank heavily in last 1–2 days (%)		
2 weeks	0.0 (0/17)	0.0 (0/17)
1 month	6.3 (1/16)	16.7 (2/12)
6 months	18.8 (3/16)	10.0 (1/10)
12 months	26.7 (4/15)	27.3 (3/11)

*Statistically significant between group difference ($P = 0.024$).

monoxide assessments. Education sessions (1/2 hour) addressed nicotine dependence as an addictive disorder, nicotine withdrawal, nutritional issues, exercise/relaxation training, and pulmonary and other medical complications of cigarette use. One-hour group therapy sessions followed each lecture to process information obtained in lectures and to provide support. Carbon monoxide assessments were completed weekly at each group session. An 8-week trial of nicotine replacement (gum or patch) was offered to intervention group members unless contraindicated. Subjects were not, however, required to use nicotine replacement.

Subjects assigned to the control group were treated in the standard fashion for their alcohol use disorder and were not discouraged from attempting to discontinue smoking. They had access to the standard resources available for smoking cessation at the Medical Center (1 educational session and nicotine replacement).

Subjects in both the control and intervention groups participated in the same outpatient alcohol treatment program. This consisted of a thorough assessment and treatment planning process, individual and group therapy, education series, and 12-step meetings with a strong emphasis on "abstinence" and relapse prevention. Cigarette smoking was not allowed in any of the hospital group rooms but was allowed on a nearby smoking "deck" and at some of the community 12-step meetings.

Study participants were contacted at 2 weeks, 1 month, 6 months, and 12 months after enrollment. The 2-week follow-up was done to ensure that we had access to the subject's correct address and phone number. At 1-, 6- and 12-month time points subjects were asked to complete a questionnaire on current and recent use of alcohol, tobacco, and other drugs. To encourage retention and questionnaire completion, participants were reimbursed \$10 at each assessment interval. Collateral informants were contacted by phone at 6 months and queried about the participant's alcohol, tobacco, and other drug use. The majority of participant and collateral assessments were in agreement.

Interval/ratio data collected over time was compared using 1 way repeated measure Analysis of Variance. A two-sample t test was used to determine differences between control and intervention groups at follow-up intervals. For nominal data χ^2 analysis was used. If the assumption of at least 80% cells having expected count less than 5 was violated, Fisher exact test of significance was used. All the analysis was done using the SPSS statistical software package.

Results

Approximately 130 persons were invited to participate in this study. Forty-two subjects chose to enroll in the study.

Table 3. Use of drugs other than alcohol*

Variable	Control	Intervention
Amphetamines		
2 weeks	0	0
1 month	0	0
6 months	7.1 (1/14)	0
12 months	6.7 (1/15)	0
Benzodiazepines/Barbiturates		
2 weeks	0	0
1 month	0	0
6 months	0	0
12 months	6.7 (2/15)	0
Hallucinogens		
2 weeks	0	0
1 month	0	0
6 months	0	0
12 months	13.3 (2/15)	9.1 (1/11)
Heroin		
2 weeks	0	0
1 month	0	0
6 months	7.1 (1/14)	0
12 months	6.7 (1/15)	0
Cocaine/Crack		
2 weeks	0	0
1 month	13.3 (2/15)	9.1 (1/11)
6 months	21.4 (3/14)	0
12 months	13.3 (2/15)	9.1 (1/11)
Marijuana		
2 weeks	0	0
1 month	6.7 (1/15)	9.1 (1/11)
6 months	28.6 (4/14)	0
12 months	20.0 (3/15)	18.2 (2/11)

*All numbers indicate % of subjects in each group that reported using the substance during the preceding study interval.

At enrollment, 21 patients were randomized to the control group and 21 to the intervention group. One control group subject was later diagnosed with schizophrenia and deemed ineligible to continue. One intervention group participant voluntarily withdrew. Table 1 characterizes the study participants. Of note, the study subjects were predominantly male and Caucasian. Their mean age was 45. They tended to be long term, heavy smokers with Fagerström scores reflecting "high" or "very high" dependence. The majority of participants reported prior substance abuse treatment and most had made prior attempts to quit cigarette smoking. Six participants in the intervention group (30%) and 10 in the control group (50%) were prescribed nicotine patch or gum during the treatment interval. One person in each group was prescribed bupropion.

Since the data collected was pilot data, a less conservative level of significance was used. The alpha level of significance was fixed at 0.2. There were no significant differences between the control and intervention subject in ethnicity, gender, years of cigarette smoking, cigarettes smoked per day, Fagerström score, history of prior treatment of alcohol/drug use problems, or number of prior serious attempts to discontinue smoking ($P > 0.2$).

Our first hypothesis, that treatment of cigarette smoking while in an outpatient alcohol treatment program would not alter alcohol use rates, was not clearly substantiated by our study. All but 1 of the variables consistently showed a trend to increased drinking in the intervention group (Table 2). At 1 month there was a statistically significant increase in having "had more than one drink" for the intervention group. However, the variable "drank heavily in last 1-2 days" showed no heavy drinking in either group at 2 weeks and a trend to less drinking in the intervention group at 6 months.

Drug use, other than alcohol, in the 24 hours prior to follow up interview was not significantly different at 2 weeks, 1 month, 6 months, or 12 months ($P > 0.2$) (Table 3).

Our second hypothesis, that smoking cessation treatment in an outpatient alcohol program would increase cigarette smoking cessation rates, was not substantiated by our study. In Table 4, resumption of cigarette use data is presented for 2-week, 1-month, 6-month, and 12-month periods. There was no significant difference at any time point assessed between the control and intervention groups when asked about cigarette use in the past 7 days ($P > 0.2$). Similarly, subjects showed no statistically significant difference when assessed for return to smoking when off cigarettes for at least 24 hours ($P > 0.2$). When asked about a 24-hour period of abstinence from cigarettes in the previous month, the intervention and control group showed no statistically significant difference ($P > 0.2$) at 2 weeks, 1 month, and 6 months. However, at the 12-month end point, the difference was statistically significant ($P = 0.051$).

Discussion

This study was a pilot study meant to assess the efficacy of a smoking cessation effort in an outpatient alcohol treatment population. This study demonstrated that an intervention aimed at smoking cessation in outpatient alcoholics did not significantly alter alcohol use rates at 6 months and 12 months. The intervention employed in the study did not enhance cigarette smoking cessation rates. There are several issues that bear discussion.

The challenges of adding an additional group and lecture session to attendance at a standard outpatient treatment program were clearly evident. Participating in the intervention necessitated that subjects attend additional lectures and group therapy sessions. While these sessions

Table 4. Resumption of cigarette use

Variable	Control	Intervention
Used cigarettes in past 7 days (%)		
2 weeks	87.5 (14/16)	78.6 (11/14)
1 month	86.7 (13/15)	63.6 (7/11)
6 months	92.9 (13/14)	88.9 (8/9)
12 months	93.3 (14/15)	100 (11/11)
Off cigarettes at least 24 hours (0%)		
2 weeks	43.8 (7/16)	28.6 (4/14)
1 month	46.7 (7/15)	63.6 (7/11)
6 months	50.0 (7/14)	66.7 (6/9)
^b 12 months	60 (9/15)	18.2 (2/11)
^a Gone back to smoking (%)		
2 weeks	71.4 (5/7)	33.3 (1/3)
1 month	42.9 (3/7)	42.9 (3/7)
6 months	83.3 (5/6)	50.0 (3/6)
12 months	77.8 (7/9)	100 (2/2)

^aOnly calculated for subjects off cigarettes at least 24 hours since the last observation.

^bStatistically significant difference between intervention and control.

were scheduled to minimize disruption to the subjects' work schedules and alcohol outpatient groups, subjects frequently did not attend. Only 6 of the 19 subjects attended all the required classes. Seven subjects attended none of the classes. Subjects reported transportation difficulties, family, and work demands as reasons for non-attendance. Many alcohol treatment patients are admitted as a result of DWI arrests/convictions and have lost their driver's license prior to admission. Asking this population to negotiate an additional trip to the medical center each week for 5 weeks appeared to be problematic. Additionally, alcoholics early in recovery frequently have tenuous relationships with their families and employers. An additional commitment could further jeopardize these relationships.

Next, the number of subjects lost to follow up was high. This is a very mobile population. Despite pursuing multiple strategies, study retention and follow up were problematic.

Last, while the return to alcohol use in the control and intervention groups was not statistically different at 6 and 12 months, there was a trend in the direction of greater alcohol use in the intervention group. One factor that might contribute to increase drinking in this arm of the study might be the stress created by the expectation of additional group attendance. Prior studies evaluating smoking cessation efforts in alcoholics in treatment were completed in inpatient or residential settings where the intervention did not require significant logistical commitment from the study subjects. Participants in the intervention arm of this study had greater additional commitments than participants in the control arm. This difference be-

tween the 2 groups may have contributed to the increased level of drinking in the intervention group.

We would intuitively expect that alcoholics in outpatient treatment of alcohol use disorders would have a similar response to smoking cessation efforts compared with their inpatient/residential counterparts. This intervention, however, may have demanded more commitment than the typical alcoholic in their early days of sobriety could maintain. A less intrusive intervention that also mandates pharmacologic aids in the same population may be more realistic and effective.

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Methamphetamine Use in Rural Midwesterners

Kathleen M. Grant, MD,^{1,2} Stephanie Sinclair Kelley, BS,² Sangeeta Agrawal, MSc,¹
Jane L. Meza, PhD,¹ James R. Meyer, MPAS,² Debra J. Romberger, MD^{1,2}

¹University of Nebraska Medical Center, Omaha, Nebraska

²Veterans Administration Nebraska Western Iowa Health Care System (Omaha Site), Omaha, Nebraska

Methamphetamine use has been characterized as a “rural” drug; however, little is known about rural methamphetamine use disorders (MUD). This study describes and compares characteristics of rural and urban patients with MUD. Rural study participants reported earlier first regular use of methamphetamine, more alcoholism, more intravenous use, and a greater number of cigarettes/day, and were more likely to report methamphetamine-related psychotic symptoms. Rural methamphetamine users report multiple factors that may contribute to medical and psychiatric complications and worsen their prognosis. This is of significant concern given the limited substance abuse, mental health, and specialty care available in most rural Midwestern communities. (Am J Addict 2007;16:79–84)

BACKGROUND

According to the World Health Organization, amphetamine and methamphetamine are the most widely abused illicit drugs in the world after cannabis. Greater than 35 million persons worldwide regularly use or abuse amphetamines and/or methamphetamines as opposed to cocaine (15 million) and heroin (fewer than 10 million).¹ Methamphetamine differs from amphetamine by the addition of a single methyl group which facilitates methamphetamine’s penetration into the central nervous system and increases its potency. Of note, methamphetamine addiction appears to progress more rapidly than cocaine addiction with faster succession through drug use milestones.² Long-term methamphetamine use causes multiple psychiatric symptoms, such as depression, anxiety, paranoia, aggression, and intense craving.^{3,4} Psychotic symptoms may persist for months or years after drug use is discontinued and require antipsychotic treatment for

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Address correspondence to Dr. Grant, Substance Use Disorders Program, VA Nebraska Western Iowa Health Care System, 4101 Woolworth Avenue, Omaha, NE 68105. E-mail: Kathleen.Grant2@med.va.gov.

long-term management. Exposure to methamphetamine can damage both serotonin-containing and dopamine-producing neurons.⁵

Methamphetamine-related problems were initially concentrated in West Coast and Southwestern U.S. populations. In 2003, however, Iowa, Missouri, and California had the largest number of methamphetamine lab incidents in the United States. The lay press has begun to characterize methamphetamine as a “rural drug,”⁶ with the majority of methamphetamine clandestine labs seized in rural areas.⁷ The availability of large quantities of anhydrous ammonia, a fertilizer commonly available in Midwestern farm settings; the isolated rural settings where the pungent odor generated in the methamphetamine manufacturing process may go unnoticed; and the economic devastation of many rural Midwestern communities contribute to the ease and allure of methamphetamine manufacture and distribution in the heartland. In one study, and of special concern, rural and small-town youths were more likely than their urban counterparts to use methamphetamine.⁸ According to 2004 data from the U.S. Census Bureau, 43.4% (758,586) of Nebraskans are rural and 56.6% (988,628) are urban. Twenty-one percent (21%) of adult Nebraskans treated in the publicly funded Nebraska Behavioral Health System in fiscal year 2005 reported a methamphetamine use disorder.

Metropolitan and non-metropolitan persons have comparable prevalence of mental health disorders.^{9–11} However, non-metropolitan persons with serious mental illness and co-occurring substance use disorders are more symptomatic,¹² and non-metropolitans adults have a higher suicide rate.¹³ Of particular relevance to a rural population with substance use disorders, the availability of mental health and substance abuse treatment services appears to vary with population density and proximity to an urban area.¹⁴

Methamphetamine use is affecting multiple segments of rural life. Methamphetamine lab seizures and the “clean up” that is required after their detection creates a financial burden in rural areas. Two methamphetamine

lab clean-ups costing as much as \$25,000–40,000 each in a county with one sheriff and two deputies may result in the loss of one of three law enforcement officials. Children in families with methamphetamine-using parents are particularly vulnerable to child abuse. One in three cases of suspected child abuse in the 16 western counties of Iowa was related to methamphetamine using parents.¹⁵

Studies characterizing methamphetamine users have largely been done in urban, West Coast treatment populations. In these studies, injection drug use was reported by 22%,⁴ 24%,¹⁶ and 47%³ of the study participants. Hallucinations were reported by 7%,⁴ while 67% reported paranoia.³ Methamphetamine users were more likely to have a psychiatric diagnosis and to be on psychiatric medications than cocaine users in a retrospective study of outpatient stimulant users.¹⁷ Longer use of methamphetamine may cause more severe psychiatric symptoms.¹⁸ Similar studies characterizing methamphetamine users in rural or urban Midwestern populations have not been done. This study describes and compares characteristics of Midwestern rural and urban persons entering substance abuse treatment with methamphetamine use disorders (MUD).

METHODS

Treatment Settings

In a study conducted at five Midwestern substance use disorder treatment sites, we compared rural and urban methamphetamine use in adult study participants. The participants were enrolled over a twelve-month period between July 2004 and June 2005 from substance abuse treatment centers in central and eastern Nebraska: Veterans Administration (VA) Nebraska Western Iowa Health Care System (Omaha site); Catholic Charities Campus for Hope (Omaha); Journeys (Omaha); Bryan-LGH Independence Center (Lincoln); and St. Francis Medical Center (Grand Island). The study protocol and consent form were approved by the University of Nebraska Medical Center Institutional Review Board and at all study sites.

Enrollment and Interview

Patients were eligible to participate in the study if they met DSM-IV criteria for methamphetamine abuse or dependence (including those in full or partial remission). Patients admitted to the treatment sites with a methamphetamine diagnosis were invited to an informational session about the study. Three hundred twenty-nine adults and adolescents attended the session. One hundred seventy-two adults and three adolescents were enrolled in the study. Findings from adult participants age 19 or older are included in this analysis. There was no remuneration for study participation. Written informed consent was obtained prior to participant interview. The study questionnaire was administered during a one-hour

interview. Information concerning patient demographics, methamphetamine, alcohol and tobacco use was obtained. Participants self-reported their race/ethnicity based on options provided by the investigator. Substance use disorder (SUD) diagnoses were confirmed using the appropriate modules from the Structured Clinical Interview for DSM-IV (SCID).¹⁹ Participants in partial or full remission were asked to answer the questions for the most recent period of methamphetamine use. Portions of the Mini-International Neuropsychiatric Interview (MINI) for depression, anxiety, psychosis, anorexia, and bulimia were administered.²⁰ The MINI requires patients to respond to questions during periods of sobriety. However, we found that a majority of participants reported experiencing symptoms of psychosis when using methamphetamines. Therefore, we chose to administer the Psychosis portion of the MINI twice, with responses recorded for intervals of sobriety and periods of methamphetamine use. Participants who met criteria for current or remitting depression may also have met criteria for recurrent depression.

Each participant reported the zip code of their residence at the time of admission to SUD treatment. Rural-urban status was determined using the 2004 Rural-Urban Commuting Area Codes (RUCA) methodology.²¹ This system, developed by the U.S. Department of Agriculture and other collaborators, links census tract data (including population density, degree of urbanization, and daily commuting information) to individual zip codes. Each zip code is then assigned to one of thirty-three RUCA codes. Each RUCA code is categorized as either urban, large rural, small rural, or isolated. For purposes of this study, we combined all non-urban categories resulting in two groups, urban and rural.

Analysis

Descriptive statistics (including means, standard deviations, frequencies, and percentages) were calculated for the demographic variables. Categorical variables were compared between rural and urban groups using a chi square or Fisher's exact test where appropriate. Continuous variables were compared between groups using a Student t-test. Statistical analysis was performed with the use of SPSS software, version 12.0.

RESULTS

Sample Characteristics

After screening 329 patients with methamphetamine abuse/dependence at treatment entry, 172 adults with methamphetamine abuse/dependence were enrolled in our study over a 12-month period. Ninety-four percent of the study participants were recruited from the three predominantly publicly funded study sites (VA, St. Francis Medical Center, and Campus for Hope), with

TABLE 1. Characteristics of study participants

	Total <i>N</i> = 172	Rural <i>n</i> = 78 (45%)	Urban <i>n</i> = 94 (55%)
Male <i>n</i> (%)	104 (60.5)	47 (60.3)	57 (60.6)
Mean age	34.29 ± 9.68	32.34 ± 9.95	35.90 ± 9.19
Caucasian (non-Hispanic) <i>n</i> (%)	150 (87.2)	68 (87.2)	82 (87.2)
Hispanic <i>n</i> (%)	10 (5.8)	4 (5.1)	6 (6.4)
Native American <i>n</i> (%)	2 (1.2)	0	2 (2.1)
Asian/Pacific Islander <i>n</i> (%)	4 (2.3)	3 (3.8)	1 (1.1)
African American <i>n</i> (%)	6 (3.5)	3 (3.8)	3 (3.2)

*Plus-minus values are mean ± standard deviation.

the remainder of participants recruited from the two private programs. Seventy-eight rural (45%) and 94 urban (55%) participants were enrolled, and 40% of the participants were female. Interestingly, if VA participants (exclusively male) were excluded, a slim majority of urban participants (51%) were female, while only 40% of rural participants were female. A majority of rural and urban participants were non-Hispanic Caucasians. The mean age at study entry was 32.3 years for rural and 35.9 for urban subjects (see Table 1).

Methamphetamine and Other Substance Use

Among persons with methamphetamine abuse or dependence entering SUD treatment, there was no significant difference in the percentage of rural and urban adults who reported that methamphetamine was their drug of choice (63% and 69%, respectively). The mean age of onset of the regular use of methamphetamine was significantly different at 21.3 years in rural and 24.9 years in urban participants. As noted above, there was a similar age difference (3.6 years) in rural and urban participants at current treatment entry. Method of methamphetamine use was significantly different in the rural and urban populations. Rural persons were significantly more likely to report "any intravenous (IV) use" (54% vs. 32%). They were also significantly more likely to report exclusive intravenous use of methamphetamine (37% vs. 20%) but significantly less likely to report exclusively smoking methamphetamine (33% vs. 56%). The number of days of methamphetamine use per week was similar in both groups (5.88 days/week in rural and 5.72 days/week in urban participants). Sixty percent of all study participants reported daily methamphetamine use with no difference between rural and urban users. Rural and urban users reported an average of three prior serious attempts to discontinue or decrease methamphetamine use, and both groups reported two lifetime SUD treatment attempts on average (see Table 2). Rural individuals were significantly more likely to meet criteria for alcohol dependence/abuse than their urban counterparts (72% vs. 45%). While a similar percentage of rural and urban methamphetamine users reported current use of tobacco and 94% reported regular use of tobacco in their lifetime,

the rural participants smoked significantly more cigarettes per day at the time of treatment entry than urban participants (16.41 vs. 11.70). There was no significant difference in non-methamphetamine stimulant or narcotic use disorders between rural and urban participants.

Methamphetamine Use and Presence of Psychiatric Symptoms

Depression, anxiety, and psychoses were frequently reported in this population. Rural methamphetamine users reported significantly more methamphetamine-related psychoses (44.8%) compared to the urban participants (28.7%). Rural methamphetamine users showed a trend toward earlier onset of psychoses ($p = 0.052$) than did urban users (24.66 vs. 29.96 years). There were no significant differences between non-methamphetamine-related psychosis in rural and urban participants. Interestingly, the frequency of self-reported psychosis unrelated to methamphetamine use was approximately 10% in all participants.

There were no significant differences in the frequency of depression, generalized anxiety disorder, anorexia nervosa, or bulimia nervosa between rural and urban participants. Current generalized anxiety disorder and current major depression were reported by 24% and 18%, respectively. There was an earlier onset of major depression in rural methamphetamine users who were in remission from their depression (19.56 vs. 23.50 years). The four-year difference in the onset in this group (with rural participants' onset preceding urban participants) was similar to the difference in age of onset of regular methamphetamine use. Rural participants had an earlier age of onset than urban participants for all but current major depressive episode, but this difference was not statistically significant. Interestingly, the difference in age of onset of generalized anxiety disorder and recurrent major depressive episode was not significant at the 0.05 level but paralleled the difference in age of onset of regular methamphetamine use (see Table 3).

DISCUSSION

Results from this study indicate that Midwesterners with methamphetamine abuse or dependence entering

TABLE 2. Drug and alcohol use in rural and urban methamphetamine users

	Total <i>N</i> = 172	Rural <i>n</i> = 78 (45%)	Urban <i>n</i> = 94 (55%)	<i>p</i> value
Methamphetamine use				
Mean age of first regular meth use	23.28 ± 8.19	21.35 ± 7.67	24.86 ± 8.27	0.005
Mean years of meth use	10.13 ± 7.67	10.50* ± 7.72	9.81 ± 7.72	0.57
Mean days/week meth used	5.80 ± 1.70	5.88 ± 1.57	5.72 ± 1.81	0.54
Daily meth use <i>n</i> (%)	103 (59.88)	47 (60.25)	56 (59.57)	0.71
Meth as drug of choice <i>n</i> (%)	114 (66.3)	49 (62.8)	65 (69.1)	0.38
Mean attempts to quit meth	2.81 ± 2.44	2.86 ± 2.26	2.77 ± 2.60	0.81
Mean SUD treatment programs	2.22 ± 1.62	2.06 ± 1.44	2.34 ± 1.76	0.27
Methamphetamine use				
Method of use <i>n</i> (%)				0.02
Smoke only	79 (45.9)	26 (33.3)	53 (56.4)	
IV only	48 (27.9)	29 (37.20)	19 (20.20)	
Smoke and IV	24 (14.0)	13 (16.7)	11 (11.7)	
Snort	9 (5.2)	5 (6.4)	4 (4.3)	
Smoke and snort	8 (4.7)	2 (2.6)	6 (6.4)	
Oral	4 (2.33)	3 (3.85)	1 (1.06)	
Any IV use <i>n</i> (%)	72 (41.9)	42 (53.8)	30 (31.9)	0.004
Drug, alcohol, and tobacco use				
Alcohol dependence <i>n</i> (%)	72 (41.9)	39 (50.0)	33 (35.1)	0.05
Alcohol abuse <i>n</i> (%)	26 (15.1)	17 (21.8)	9 (9.6)	0.03
Alcohol dependence or abuse <i>n</i> (%)	98 (56.97)	56 (71.79)	42 (44.68)	<0.001
Stimulant (non-meth) dependence or abuse <i>n</i> (%)	68 (39.53)	34 (43.58)	34 (36.17)	0.32
Narcotic dependence or abuse <i>n</i> (%)	29 (16.86)	15 (19.23)	14 (14.89)	0.45
Ever used tobacco regularly <i>n</i> (%)	161 (93.6)	73 (93.6)	88 (93.6)	0.99
Currently use tobacco <i>n</i> (%)	150 (87.2)	69 (88.5)	81 (86.2)	0.65
Mean cigarettes/day [†]	13.83 ± 8.05	16.41 ± 8.84	11.70 ± 6.66	<0.001

**n* = 77 (accurate data available for 77 rural participants); Plus-minus values are mean ± standard deviation.

[†]*n* = 73 rural; *n* = 88 urban (data are from participants who ever used tobacco regularly).

Abbreviation: meth = methamphetamine.

SUD treatment have a long history of regular methamphetamine use (10 years ± 7.67), have made multiple prior attempts to discontinue use, and use methamphetamine six days per week. Most have used tobacco regularly at some time, and approximately 87% currently use tobacco. Further, Midwestern methamphetamine users entering SUD treatment have significant alcoholism, psychiatric impairment, and high-risk drug use practices, as has been reported in other treatment populations.

A comparison of rural and urban study participants shows a consistent pattern of earlier first regular use of methamphetamine, earlier onset of methamphetamine-related psychosis, and earlier presentation for treatment in rural persons. These findings may echo the greater likelihood of rural and small-town youth to use methamphetamine, as previously noted.⁸ Additional significant differences in rural and urban Midwesterners at the time of treatment entry were also noted. Rural methamphetamine users were more likely to have alcohol abuse/dependence and smoked significantly more cigarettes

than urban participants. Rural methamphetamine users reported significantly more IV use of methamphetamine. Injection use of methamphetamine has been associated with more psychopathology than those who use alternate methods of administration. Zweben et al.²² reported that those who injected methamphetamine had significantly higher Brief Symptom Inventory Global Severity Index and Positive Symptom scores and subscale scores (including paranoid ideation and psychoticism) and had significantly higher Beck Depression Inventory Scores, more suicide attempts, and suicidal thoughts.

Rural participants in this study reported significantly more methamphetamine related psychoses, and 10% of all study participants reported psychotic symptoms that they perceived to be unrelated to their methamphetamine use. This is in contrast to the lifetime prevalence of 5.5% of schizophrenia in persons with an amphetamine diagnosis and lifetime prevalence of schizophrenic/schizophreniform disorders (1.5%) and bipolar affective disorders (1.3%) in a combined community and institutionalized population

TABLE 3. Mental illness in rural and urban methamphetamine users

	Total <i>N</i> = 172	Rural <i>n</i> = 78 (45%)	Urban <i>n</i> = 94 (55%)	<i>p</i> value
Meth-related psychosis (current and lifetime) <i>n</i> (%)	62 (36.04)	35 (44.87)	27 (28.72)	0.022
Current: mean age-onset	26.98 ± 10.25	24.66 ± 10.04	29.96 ± 9.91	0.052
Lifetime: mean age-onset	27.00 ± 10.23	24.69 ± 10.03	29.96 ± 9.91	0.053
Not meth-related psychosis (current and lifetime) <i>n</i> (%)	17 (9.88)	8 (10.25)	9 (9.57)	0.881
Current: mean age onset	19.31 ± 8.45	16.13 ± 5.11	22.50 ± 10.19	0.136
Lifetime: mean age onset	19.13 ± 9.59	16.13 ± 5.11	22.13 ± 12.27	0.223
Generalized anxiety disorder: current <i>n</i> (%)	41 (23.8)	15 (19.2)	26 (27.7)	0.197
Mean age-onset	21.07 ± 9.63	19.00 ± 8.73	22.27 ± 10.08	0.301
Major depressive episode: current <i>n</i> (%)	31 (18.0)	13 (16.7)	18 (19.1)	0.673
Mean age-onset	24.42 ± 13.77	27.92 ± 14.95	21.89 ± 12.67	0.235
Major depressive episode: recurrent <i>n</i> (%)	62 (36.0)	33 (42.3)	29 (30.9)	0.119
Mean age-onset	21.90 ± 9.22	20.76 ± 8.00	23.21 ± 10.44	0.301
Major depressive episode: in remission <i>n</i> (%)	82 (47.7)	39 (50.0)	43 (45.7)	0.578
Mean age-onset	21.60 ± 8.97	19.56 ± 7.71	23.50 ± 9.71	0.048
Anorexia nervosa: current <i>n</i> (%)	5 (2.9)	0	5 (5.3)	0.064 [†]
Mean age-onset	16.40 ± 6.42		16.40 ± 6.42	
Bulimia nervosa: current <i>n</i> (%)	3 (1.7)	2 (2.6)	1 (1.1)	0.591 [†]
Mean age-onset	25.00 ± 7.55	21.50 ± 6.36	32.00	0.407

*Age-onset data available for meth-related psychosis (*n* = 32 rural; *n* = 25 urban), not meth-related psychosis (*n* = 8 urban), and major depressive episode in remission (*n* = 42 urban).

[†]Fisher's Exact Test.

Abbreviation: meth = methamphetamine.

Plus-minus values are mean ± standard deviation.

reported in the Epidemiologic Catchment Area (ECA) Study.²³ The frequency of depression, anxiety, and bulimia were similar in rural and urban participants; however, there was a trend to earlier onset of anxiety and depression in rural study participants in all but those with current major depression.

Taken together, these findings suggest that rural methamphetamine users may be at higher risk for medical and psychiatric complications of their methamphetamine use. The infectious complications associated with injection drug use and the medical risks associated with greater cigarette use and alcoholism may contribute to a higher frequency of infectious diseases, chronic lung disease, and alcohol-related liver disease in rural than urban methamphetamine users. Studies of medical co-morbidities associated with methamphetamine use may have particular relevance in a rural Midwestern population.

The findings from this study suggest that rural Midwesterners with methamphetamine use disorders may have a poorer prognosis than their urban counterparts. Psychiatric disorders have consistently been shown to worsen SUD treatment outcomes. The finding of significantly greater methamphetamine-related psychotic symptoms in rural users may reflect their greater IV use or other factors yet to be identified. In any case, the finding of increased methamphetamine-related psychoses may result in poorer treatment outcomes in rural Midwesterners. This is of particular concern, given the limited

psychiatric care available in many rural communities. The finding of greater alcohol abuse/dependence in rural than urban participants may also affect methamphetamine treatment outcomes. The combination of alcoholism and cocaine dependence has been shown to result in poorer treatment outcomes than when either drug is treated alone.²⁴⁻²⁷ Similar studies of treatment outcomes in alcoholic methamphetamine users have not been done and, again, may have particular interest to those treating rural methamphetamine users.

This study has a number of limitations. First, study participants were a treatment-seeking population. They were "in treatment" for their SUD largely in publicly funded settings after being placed on a waiting list prior to treatment entry. There may be significant differences in access to SUD treatment between rural and urban study participants in that one of the study sites that serves largely rural persons with SUD is the primary treatment site for a 22 county, 18,000 square mile area. Study participants may not be representative of typical rural or urban methamphetamine addicts. Second, confounders other than rural status, such as easier accessibility of methamphetamine and alcohol in rural settings, may have contributed to earlier first methamphetamine use and increased alcoholism but were not measured in this study. Third, participants were characterized as rural or urban based only upon their most recent residence. We did not record length of time at that residence, and participants

may have been incorrectly categorized as rural or urban based solely on their most recent zip code. Additionally, we did not include rural or urban control groups in our study. Such control groups may have been useful in further evaluating the significance of our findings of alcoholism, tobacco use, and mental illness in persons with methamphetamine use disorders. Lastly, findings in a limited geographical setting such as this may not be generalizable to rural populations in other areas of the United States.

In summary, these findings suggest that rural Midwesterners with methamphetamine use disorders in substance abuse treatment have prognostic factors frequently associated with poorer treatment outcomes and may have a greater risk of co-morbid medical and psychiatric disorders. This is of special concern, given the limited substance abuse, mental health, and specialty medical care typically available in rural Midwestern communities. Studies of rural methamphetamine addiction and treatment are warranted to further investigate this population.

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