

RECOVERY MANAGEMENT AND RECOVERY-ORIENTED SYSTEMS OF CARE: SCIENTIFIC RATIONALE AND PROMISING PRACTICES

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Chapter Twelve

Assertive Linkage to Communities of Recovery

■ SUMMARY OF KEY POINTS ■

- Participation in recovery mutual aid groups can elevate long-term recovery outcomes for diverse populations.
- The effects of recovery mutual aid involvement reflect multiple mechanisms of change and vary in terms of the number of meetings in early recovery, duration of participation, and intensity of participation.
- Combining addiction treatment and recovery mutual aid for persons with severe substance use disorders is more effective than either used alone.
- The positive effects of recovery mutual aid groups are compromised by weak linkage and a progressive attrition in participation over time.
- Half of all clients completing treatment do not participate in recovery support groups after discharge, and of those who do, 40-60% discontinue participation within a year of treatment discharge.
- Assertive linkage to a recovery support group is more effective than passive referral (verbal encouragement to attend), but the linkage process in most treatment programs is of the passive variety.
- Participation in other recovery community institutions (e.g., recovery homes, recovery schools, recovery industries, recovery support centers, recovery ministries/churches) may enhance long-term recovery, but evaluation of this potential is at an early stage.
- Promising practices related to linkage to communities of recovery include enhanced institutional linkages between treatment institutions and communities of recovery; use of assertive linkage procedures; orientation and linkage to Internet-based recovery support groups; and expansion of treatment philosophies to embrace diverse religious, spiritual, and secular pathways of recovery.

“The benefits to be realized from developing strong social networks in support of drug-free functioning appear to provide the potential for maintaining and extending the gains from treatment.”

— Conclusion of a five-year follow-up study of treated opiate addicts⁵²⁷

527. Flynn, P.M., Joe, G.W., Broome, K.M., Simpson, D.D., & Brown, B.S. (2003). Recovery from opioid addiction in DATOS. *Journal of Substance Abuse Treatment*, 25(3), 177-186.

528. White, W. (1998). *Slaying the dragon: The history of addiction treatment and recovery in America*. Bloomington, IL: Chestnut Health Systems; Humphreys, K. (2004). *Circles of recovery: Self-help organizations for addictions*. Cambridge: Cambridge University Press.

529. Toumbourou, J.W., Hamilton, M., U'Ren, A., Stevens-Jones, P., & Storey, G. (2002). Narcotics Anonymous participation and changes in substance use and social support. *Journal of Substance Abuse Treatment*, 23, 61-66.

530. Bebbington, P.E. (1976). The efficacy of Alcoholics Anonymous: The elusiveness of hard data. *British Journal of Psychiatry*, 128, 572-580; Kownascki, R.J., & Shadish, W.R. (1999). Does Alcoholics Anonymous work? The results from a meta-analysis of controlled experiments. *Substance Use and Misuse*, 34(13), 1897-1916; Emrick, D.C., Tonigan, J.S., Montgomery, H., & Little, L. (1993). Alcoholics Anonymous: What is currently known? In B. McCrady & W.R. Miller (Eds.), *Research on Alcoholics Anonymous: Opportunities and alternatives* (pp. 41-78). Piscataway, NJ: Rutgers Center for Alcohol Studies.

531. Humphreys, K. (2006b). The trial of Alcoholics Anonymous. *Addiction*, 101, 617-618.

532. Carroll, S. (1993). Spirituality and purpose in life in alcoholism recovery. *Journal of Studies on Alcohol*, 54, 297-301.

533. Sommer, S.M. (1997). The experience of long-term recovering alcoholics in Alcoholics Anonymous: Perspectives on therapy. *Alcoholism Treatment Quarterly*, 15, 1-14.

534. Kelly, J.F., Stout, R., Zywiak, W., & Schneider, R. (2006). A 3-year study of addiction mutual-help group participation following intensive outpatient treatment. *Alcoholism: Clinical and Experimental Research*, 30(8), 1381-1392.

535. Galanter, M., Egelko, S., & Edwards, H. (1993). Rational Recovery: Alternatives to AA for addiction? *American Journal of Drug and Alcohol Abuse*, 19, 499-510.

536. Connors, G.J., & Dermen, K.H. (1996). Characteristics of participants in Secular Organization for Sobriety (SOS). *American Journal of Drug and Alcohol Abuse*, 22(2), 281-295.

537. White, W., & Nicolaus, M. (2005). Styles of secular recovery. *Counselor*, 6(4), 58-61.

Limited but Expanding Scope of Research

American communities of recovery have existed for more than 250 years and are currently growing in size, philosophical diversification (religious, spiritual, secular, abstinence-based, moderation-based), membership characteristics (age, gender, ethnicity, primary drug choice), and meeting formats (face-to-face meetings, meetings for special populations, and online meetings/resources).⁵²⁸ (See http://www.facesandvoicesofrecovery.org/resources/support_home.php for a regularly updated guide to addiction recovery support groups in the United States.)

Most of what we know from the standpoint of science about recovery mutual aid groups is based on studies of Twelve Step support groups, Alcoholics Anonymous and to a lesser extent Narcotics Anonymous.⁵²⁹ Early AA studies drew criticism in terms of the methods in which they were conducted,⁵³⁰ but the number and methodological rigor of studies of AA have increased dramatically. Keith Humphreys summarizes:

*Strong views about AA one way or the other will always survive, no matter what evidence accumulates, but the studies of the past 15 years have established beyond any reasonable doubt that high-quality AA trials are possible, and that such studies usually reinforce rather than undermine the excellent reputation the fellowship enjoys around the world.*⁵³¹

Caution is indicated in applying research findings from studies of AA to other groups or to persons in recovery who do not participate in recovery support groups. AA members are a select subset of the total pool of persons with AOD problems,⁵³² and even studies of AA are based primarily on AA members in their early years of recovery who completed professional treatment.⁵³³

Few studies have been conducted of other recovery support groups or of Twelve Step members in long-term recovery.⁵³⁴ The preliminary reports in the scientific and professional literature on groups such as Women for Sobriety, Rational Recovery,⁵³⁵ Secular Organization for Sobriety,⁵³⁶ and LifeRing Secular Recovery⁵³⁷ are descriptive rather than controlled outcome studies. Given these limitations, we will proceed cautiously in summarizing what is known about peer-based recovery support groups. The extent to which findings about AA can be extended to other groups is at this time unknown.

538. Vaillant, G.E. (2003). A 60-year follow-up of alcoholic men. *Addiction*, 98, 1043-1051; Timko, C., Moos, R.H., Finney, J.W., Moos, B.S., & Kaplowitz, M.S. (1999). Long-term treatment careers and outcomes of previously untreated alcoholics. *Journal of Studies on Alcohol*, 60(4), 437-447; Emrick, D.C., Tonigan, J.S., Montgomery, H., & Little, L. (1993). Alcoholics Anonymous: What is currently known? In B. McCrady & W.R. Miller (Eds.), *Research on Alcoholics Anonymous: Opportunities and alternatives* (pp. 41-78). Piscataway, NJ: Rutgers Center for Alcohol Studies; Morgenstern, J., Labouvie, E., McCray, B.S., Kahler, C.W., & Frey, R.M. (1997). Affiliation with Alcoholics Anonymous after treatment: A study of its therapeutic effects and mechanisms of action. *Journal of Consulting and Clinical Psychology*, 65(5), 768-777; Fiorentine, R. (1999). After drug treatment: Are 12-step programs effective in maintaining abstinence? *American Journal of Drug and Alcohol Abuse*, 25(1), 93-116; Humphreys, K., Wing, S., McCarty, D., Chap-pel, J., Galant, L., Haberle, B., Horvath, A.T., Kaskutas, L.A., Kirk, T.K., Kivlahan, D., Laudet, A., McCrady, B.S., McLellan, A.T., Morgenstern, J., Townsend, M., & Weiss, R. (2004). Self-help organizations for alcohol and drug problems: Toward evidence-based practice and policy. *Journal of Substance Abuse Treatment*, 26(3), 151-165; McKellar, J., Stewart, E., Humphreys, K. (2003). Alcoholics Anonymous involvement and positive alcohol-related outcomes: Cause, consequences, or just a correlate? A prospective 2-year study of 2,319 alcohol-dependent men. *Journal of Consulting and Clinical Psychology*, 71(2), 302-308; Morganstern, J., Bux, D.A., Labouvie, E., Morgan, T., Blanchard, K.A., & Muench, F. (2003). Examining mechanisms of action in 12-step community outpatient treatment. *Drug and Alcohol Dependence*, 72, 237-247.

539. Cuijpers, P., Riper, H., & Lemmers, L. (2004). The effects of brief interventions for problem drinking: A meta-analysis. *Addiction*, 99, 839-845; Timko, C.,

DeBenedetti, A., Moos, B.S., & Moos, R.H. (2006). Predictors of 16-year mortality among individuals initiating help-seeking for an alcoholic use disorder. *Alcoholism: Clinical and Experimental Research*, 30(10), 1711-1720.

540. Mann, R.E., Flanzalcam, R., Smart, R., Rush, B.R., & Suurvali, H. (2006). Alcohol consumption, Alcoholics Anonymous membership, and suicide mortality rates, Ontario, 1968-1991. *Journal of Studies on Alcohol*, May, 445-453.

541. White, W., & Kurtz, E. (2006a). The varieties of recovery experience. *International Journal of Self Help and Self Care*, 3(1-2), 21-61.

542. Kelly, J.F., Stout, R., Zywiak, W., & Schneider, R. (2006). A 3-year study of addiction mutual-help group participation following intensive outpatient treatment. *Alcoholism: Clinical and Experimental Research*, 30(8), 1381-92.

543. Humphreys, K., Mavis, B.E., & Stoffelmayr, B.E. (1994). Are twelve-step programs appropriate for disenfranchised groups? Evidence from a study of posttreatment mutual help group involvement. *Prevention in Human Services*, 17, 165-180.

544. Tonigan, J.S., Connors, G.J., & Miller, W.R. (1998). Special populations in Alcoholics Anonymous. *Alcohol Health and Research World*, 22(4), 281-285; Kelly, J.F., Myers, M.G., & Brown, S.A. (2000). A multivariate process model of adolescent 12-step attendance and substance use outcome following inpatient treatment. *Psychology of Addictive Behaviors*, 14, 376-389; Brown, S.A., & Ramo, D.E. (2006). Clinical course of youth following treatment for alcohol and drug problems. In H.A. Liddle & C.L. Rowe (Eds.), *Adolescent substance abuse: Research and clinical advances* (pp. 79-103). Cambridge, NY: Cambridge University Press.

Summary of Effects across Diverse Populations

Research on Alcoholics Anonymous and other recovery mutual aid groups confirms their ability to enhance long-term recovery outcomes for a broad spectrum of individuals.⁵³⁸ Participation in groups such as AA also reduces alcohol-related mortality rates,⁵³⁹ particularly that of alcoholism-related suicide.⁵⁴⁰

While criticisms of AA include references to its foundational experience with White, middle-aged men in late stages of alcoholism, recent studies have confirmed its potential effectiveness with:⁵⁴¹

- women,⁵⁴²
- people of color,⁵⁴³
- young people,⁵⁴⁴
- people with co-occurring psychiatric disorders (including those on medication),⁵⁴⁵
- people without religious or spiritual orientation,⁵⁴⁶ and
- people who use drugs other than alcohol.⁵⁴⁷

Women participate more and benefit more from recovery support groups following treatment than do men.⁵⁴⁸ Similarly, African Americans are more likely to participate in AA following treatment than Caucasians.⁵⁴⁹ There is growing evidence that drug choice is not a clear predictor of affiliation with a particular mutual aid group. In NIDA's Collaborative Cocaine Treatment Study, 83.9% of those who regularly attended support meetings attended Alcoholics Anonymous; only 24.6% had ever attended a meeting of Cocaine Anonymous.⁵⁵⁰

Recovery support groups (particularly AA and NA) have the advantage of being geographically accessible to most individuals, and they are available without cost (other than token contributions) and without a potentially stigma-laden medical diagnosis or life-disrupting treatment protocol.⁵⁵¹

545. Chi, F.W., Satre, D.D., & Weisner, C. (2006). Chemical dependency patients with cooccurring psychiatric diagnoses: Service patterns and 1-year outcomes. *Alcoholism: Clinical and Experimental Research*, 30(5), 851-859; Timko, C., & Sempel, J.M. (2004). Intensity of acute services, self-help attendance and one-year outcomes among dual diagnosis patients. *Journal of Studies on Alcohol*, 65, 274-282; Laudet, A., Magura, S., Vogel, H.S., & Knight, E. (2000). Addiction services: Support, mutual aid and recovery from dual diagnosis. *Community Mental Health Journal*, 36(5), 457-476; Tonigan, J.S., & Kelley, J.F. (2004). Beliefs about AA and the use of medications: A comparison of three groups of AA-exposed alcohol dependent persons. *Alcoholism Treatment Quarterly*, 22(2), 67-78; Swift, R.M., Duncan, D., Nirenberg, T., & Femino, J. (1998). Alcoholic patients' experience and attitudes on pharmacotherapy for alcoholism. *Journal of Addictive Diseases*, 17, 35-47; Rychtarik, R.G., Connors, G.J., Dermen, K.H., & Stasiewicz, P.R. (2000). Alcoholics Anonymous and the use of medications to prevent relapse: An anonymous survey of member attitudes. *Journal of Studies on Alcohol*, 61, 134-138.

546. Connors, G.J., Tonigan, S., & Miller, W. (2001). *Religiosity and responsiveness to alcoholism treatments*. Bethesda, MD: Department of Health and Human Services; Brown, B.S., O'Grady, K.E., Farrell, E.B., Flechner, I.S., & Nurco, D.N. (2001). Factors associated with frequency of 12-step attendance by drug abuse clients. *American Journal of Drug and Alcohol Abuse*, 27(1), 147-160; Winzelberg, A., & Humphreys, K. (1999). Should patients' religiosity influence clinicians' referral to 12-step self-help groups? Evidence from a study of 3018 male substance abuse patients. *Journal of Counseling and Clinical Psychology*, 67(5), 790-794.

547. Fiorentine, R. (1999). After drug treatment: Are 12-step programs effective in maintaining abstinence? *American Journal of Drug and Alcohol Abuse*, 25(1), 93-116; Siegal, H.A., Li, L., & Rapp, R.C. (2001). Abstinence trajectories among treated crack cocaine users. *Addictive Behaviors*, 26, 1-13.

548. Moos, R.H., Moos, B.S., & Timko, C. (2006). Gender, treatment and self-help in remission from alcohol use disorders. *Clinical Medicine & Research*, 4(3), 163-174; Grella, C.E., Scott, C.K., & Foss, M.A. (2005). Gender differences in long-term drug treatment outcomes in Chicago PETS. *Journal of Substance Abuse Treatment*, 28, S3-S12; Timko, C., Moos, R.H., Finney, J.W., & Connell, E.G. (2002). Gender differences in help-utilization and the 8-year course of alcohol abuse. *Addiction*, 97, 877-889.

549. Harris, A.H.S., McKellar, J.D., Moos, R.H., Schaefer, J.A., & Cronkite, R.C. (2006). Predictors of engagement in continuing care. *Drug & Alcohol Dependence*, 84, 93-101; Humphreys, K., Mavis, B.E., & Stoffelmayr, B.E. (1991). Factors predicting attendance at self-help groups after substance abuse treatment: Preliminary findings. *Journal of Consulting and Clinical Psychology*, 59, 591-595.

550. Weiss, R.D., Griffin, M.L., Gallop, R., Onken, L.S., Gastfriend, D.R., Daley, D., Crits-Cristoph, P., Bishop, S., & Barber, J.P. (2000). Self-help group attendance and participation among cocaine dependent patients. *Drug and Alcohol Dependence*, 60, 169-177.

551. Kelly, J.F., Stout, R., Zywiak, W., & Schneider, R. (2006). A 3-year study of addiction mutual-help group participation following intensive outpatient treatment. *Alcoholism: Clinical and Experimental Research*, 30(8), 1381-1392.

Dose Effects

The positive effects of peer-based recovery support groups rise in tandem with dose (the number of meetings attended).⁵⁵² Clients who attend a greater number of recovery support meetings during treatment go on to participate in a greater number of such meetings after treatment.⁵⁵³ This positive dose and timing principle of mutual aid participation applies primarily to early stages of recovery, as research has documented a later style of recovery in which AA members decrease or stop meeting participation but continue their sobriety and other recovery-related activities.⁵⁵⁴ Good recovery outcomes are also reported for at least some “non-attending participators” in early recovery (individuals who do not attend meetings but participate in other recovery-supportive activities).⁵⁵⁵

Intensity Effects

In general, recovery rates improve and alcohol and drug problem severity declines as involvement with recovery support groups and intensity of participation increase (e.g., applying concepts to daily problem solving, reading recovery literature, sober socializing, service work).⁵⁵⁶

Duration Effect

There is also a duration effect of AA participation: those who continue to participate in AA after the first year of involvement have better long-term recovery rates than those who did not participate in AA or those who or reduce or stop participation after year-one involvement.⁵⁵⁷

Combining Treatment and Recovery Support Group Participation

Combining addiction treatment and recovery mutual aid groups is more predictive of long-term recovery than either activity alone, suggesting an additive or synergistic effect of combining these two recovery support activities.⁵⁵⁸ Clients who attend mutual aid groups do better following treatment than clients who do not attend such groups, regardless of the type of treatment they originally received.⁵⁵⁹ Those who participate in both treatment and AA are less likely to drop out of AA than those who participate only in AA.⁵⁶⁰

552. Humphreys, K., Moos, R.J., & Cohen, C. (1997). Social and community resources and long-term recovery from treated and untreated alcoholism. *Journal of Studies on Alcohol*, 58(3), 231-238.

553. Tonigan, J.S., Connors, G.J., & Miller, W.R. (2003). Participation and involvement in Alcoholics Anonymous. In T.F. Babor & F.K. Del Boca (Eds.), *Treatment matching in alcoholism* (pp. 184-204). Cambridge, UK: Cambridge University Press; Etheridge, R.M., Craddock, S.G., Hubbard, R.L., & Rounds-Bryant, J.L. (1999). The relationship of counseling and self-help participation to patient outcomes in DATOS. *Drugs and Alcohol Dependence*, 57, 99-112.

554. Tonigan, J.S. (2005). Patterns of AA attendance and drinking over a 10-year follow-up. *Alcoholism: Clinical and Experimental Research*, 29(Suppl), 381; Hoffmann, H.C. (2003). Recovery careers of people in Alcoholics Anonymous: Moral careers revisited. *Contemporary Drug Problems*, 30, 647-682; Kaskutas, L.A., Ammon, L., Delucchi, K., Room, R., Bond, J., & Weisner, C. (2005). Alcoholics Anonymous careers: Patterns of AA involvement five years after treatment entry. *Alcoholism: Clinical and Experimental Research*, 29(11), 1983-1990; Tonigan, J.S., Miller, W.R., Chavez, R., Porter, N., Worth, L., Westphal, V., Carroll, L., Repa, K., Martin, A., & Tracy, L.A. (2002). AA participation 10 years after Project MATCH treatment: Preliminary findings. *Alcoholism: Clinical and Experimental Research*, 26(Suppl), 42A; Laudet, A., Savage, R., & Mahmood, D. (2002). Pathways to long-term recovery: A preliminary investigation. *Journal of Psychoactive Drugs*, 34, 305-311; Weiss, R.D., Griffin, M.L., Gallop, R.G., Najavits, L.M., Frank, A., Crits-Christoph, P., Thase, M.E., Blaine, J., Gastfriend, D.R., Daley, D., & Luborsky, L. (2005). The effect of 12-step self-help group attendance and participation on drug use outcomes among cocaine-dependent patients. *Drug and Alcohol Dependence*, 77, 177-184.

555. Weiss, R.D., Griffin, M.L., Gallop, R.G., Najavits, L.M., Frank, A., Crits-Christoph, P., Thase, M.E., Blaine, J., Gastfriend, D.R., Daley, D., & Luborsky, L. (2005). The effect of 12-step self-help group attendance and participation on drug use outcomes among cocaine-dependent patients. *Drug and Alcohol Dependence*, 77, 177-184.

556. Sheeren, M. (1988). The relationship between relapse and involvement in Alcoholics Anonymous. *Journal of Studies on Alcohol*, 49(1), 104-106; Montgomery, H.A., Miller, W.R., & Tonigan, J.S. (1995). Does Alcoholics Anonymous involvement predict treatment outcome? *Journal of Substance Abuse Treatment*, 12(4), 241-246; Cacciola, J.S., Dugosh, K., Folz, C., Leahy, P., & Stevens, R. (2005). Treatment outcomes: First time versus treatment-experienced clients. *Journal of Substance Abuse Treatment*, 28(Suppl 1), S13-S22.

557. Moos, R.H., & Moos, B.S. (2005b). Sixteen-year changes and stable remission among treated and untreated individuals with alcohol use disorders. *Drug and Alcohol Dependence*, 80(3), 337-347.

558. Moos, R.H. & Moos, B.S. (2005). Paths of entry into Alcoholics Anonymous: Consequences for participation and remission. *Alcoholism: Clinical and Experimental Research*, 29(10), 1858-1868; Walsh, D., Hingson, R., Merrigan, D., Levenson, S.M., Cupples, L.A., Heeren, T., Coffman, G.A., Becker, C.A., Barker, T.A., & Hamilton, S.K. (1991). A randomized trial of treatment options for alcohol-abusing workers. *New England Journal of Medicine*, 325, 775-782; Fiorentine, R., & Hillhouse, M. (2000). Drug treatment and 12-step program participation: The additive effects of integrated recovery activities. *Journal of Substance Abuse Treatment*, 18(1), 65-74; Kelly, J.F. (2003). Self-help for substance-use disorders: History, effectiveness, knowledge gaps, and research opportunities. *Clinical*

Mutual aid by itself is not an effective substitute for treatment for populations characterized by high problem severity/complexity.⁵⁶¹ Post-treatment participation in Twelve Step groups may be more important than continued outpatient counseling in sustaining recovery,⁵⁶² and such participation has the added benefit of reducing continuing care costs⁵⁶³ and post-treatment health care costs.⁵⁶⁴ Linking clients from treatment to indigenous recovery support groups and recovery community institutions is even more important in light of the diminished access to treatment and diminished dose of treatment produced by the recent fiscal austerity and aggressive gatekeeping of managed behavioral health care.⁵⁶⁵

Timing of Linkage

Clients who attend recovery support meetings during treatment, are exposed to Twelve Step literature, and are expected to build Twelve Step-related friendships and a sponsorship relationship during treatment are more likely to attend Twelve Step meetings after treatment than those who are simply referred to support meetings at the end of treatment.⁵⁶⁶ Again, patterns of meeting attendance established during treatment tend to be sustained after treatment.⁵⁶⁷

Variability of Response

Patterns of response to mutual aid exposure include the patterns of those who fully respond, those who partially respond, and those who do not respond at all.⁵⁶⁸ In a study of clients linked to AA as part of their treatment experience, the proportion of responses to AA included 31% optimal response, 42.7% partial response, and 22.3% non-response, with the non-responders having the worst post-treatment recovery outcomes.⁵⁶⁹ The documented variability of response and the growing recognition of multiple pathways of long-term recovery underscore recommendations for addiction treatment programs to expose their clients to a wide spectrum of secular, spiritual, and religious frameworks of long-term recovery support.⁵⁷⁰

Psychology Review, 23(5), 639-663; Dawson, D.A., Grant, B.F., Stinson, F.S., & Chou, P.S. (2006). Estimating the effect of help-seeking on achieving recovery from alcohol dependence. *Addiction*, 101, 824-834; Kisson, W., McLeod, C., & McKay, J. (2003). The longitudinal relationship between self-help group attendance and course of recovery. *Evaluation and Program Planning*, 26, 311-323; Harrison, P.A., & Asche, S.E. (2001). Outcomes monitoring in Minnesota: Treatment implications, practical implications. *Journal of Substance Abuse Treatment*, 21, 173-183.

559. Tonigan, J.S., Connors, G.J., & Miller, W.R. (2003). Participation and involvement in Alcoholics Anonymous. In T.F. Babor & F.K. Del Boca (Eds.), *Treatment matching in alcoholism* (pp. 184-204). Cambridge, UK: Cambridge University Press.

560. Moos, R.H. & Moos, B.S. (2005). Paths of entry into Alcoholics Anonymous: Consequences for participation and remission. *Alcoholism: Clinical and Experimental Research*, 29(10), 1858-1868.

561. Walsh, D., Hingson, R., Merrigan, D., Levenson, S.M., Cupples, L.A., Heeren, T., Coffman, G.A., Becker, C.A., Barker, T.A., & Hamilton, S.K. (1991). A randomized trial of treatment options for alcohol-abusing workers. *New England Journal of Medicine*, 325, 775-782.

562. Johnson, J.E., Finney, J.W., & Moos, R.H. (2006). End-of-treatment outcomes in cognitive-behavioral treatment and 12-step substance use treatment programs: Do they differ and do they predict 1-year outcomes? *Journal of Substance Abuse Treatment*, 31, 41-50.

563. Humphreys, K., & Moos, R.H. (2001). Can encouraging substance abuse patients to participate in self-help groups reduce demand for health care? A quasi-experimental study. *Alcoholism: Clinical and Experimental Research*, 25,

711-716; Humphreys, K., & Moos, R.H. (2007). Encouraging posttreatment self-help group involvement to reduce demand for continuing care services: Two year clinical and utilization outcomes. *Alcoholism: Clinical and Experimental Research*, 31(1), 64-68.

564. Humphreys, K., & Moos, R.H. (1996). Reduced substance-related health care costs among voluntary participants in Alcoholics Anonymous. *Psychiatric Services*, 47(7), 709-713.

565. Laudet, A., & Sands, B. (2007). An exploration of the effect of on-site 12-Step meetings on post-treatment outcomes among polysubstance-dependent clients. *Evaluation Review*, 31(6), 613-646.

566. Tonigan, J.S., Connors, G.J., & Miller, W.R. (2003). Participation and involvement in Alcoholics Anonymous. In T.F. Babor & F.K. Del Boca (Eds.), *Treatment matching in alcoholism* (pp. 184-204). Cambridge, UK: Cambridge University Press; Kelly, J.F., & Moos, R. (2003). Dropout from 12-step self-help groups: Prevalence, predictors, and counteracting treatment influences. *Journal of Substance Abuse Treatment*, 24(3), 241-250; Moos, R.H., & Moos, B.S. (2005b). Sixteen-year changes and stable remission among treated and untreated individuals with alcohol use disorders. *Drug and Alcohol Dependence*, 80(3), 337-347.

567. Weiss, R.D., Griffin, M.L., Gallop, R.G., Najavits, L.M., Frank, A., Crits-Christoph, P., Thase, M.E., Blaine, J., Gastfriend, D.R., Daley, D., & Luborsky, L. (2005). The effect of 12-step self-help group attendance and participation on drug use outcomes among cocaine-dependent patients. *Drug and Alcohol Dependence*, 77, 177-184. Moos, R.H., & Moos, B.S. (2006). Participation in treatment and Alcoholics Anonymous: A 16-year follow-up of initially untreated individuals. *Journal of Clinical Psychology*, 62(6), 735-750.

Mechanisms of Change

Participation in recovery mutual aid groups exerts a positive influence on recovery outcomes through multiple mechanisms of change. Some of the most potent of such mechanisms identified in the research literature include the following:

- self-appraisal of harm and commitment to abstinence,⁵⁷¹
- ongoing self-monitoring,⁵⁷²
- sustained remotivation for abstinence,⁵⁷³
- spirituality,⁵⁷⁴
- enhanced coping skills,⁵⁷⁵
- increased self-efficacy,⁵⁷⁶
- social support that offsets the influence of pro-drinking social networks,⁵⁷⁷
- 24-hour availability,⁵⁷⁸
- helping other alcoholics,⁵⁷⁹
- recognition of high-risk situations and stressors,⁵⁸⁰
- role modeling and experience-based advice on how to stay sober,⁵⁸¹ and
- participation in rewarding activities.⁵⁸²

Sponsoring others appears to be a particularly potent ingredient, with some long-term post-treatment follow-up studies noting over 90% remission rates in persons who sponsored others throughout the follow-up period.⁵⁸³

Other Recovery Community Involvement

Affiliation with recovery support groups and other recovery community institutions (e.g., recovery homes, recovery schools, recovery industries, recovery support centers) may work by helping individuals transition from a dependency on drugs to a “prodependency” on people.⁵⁸⁴

568. Morgenstern, J., Kahler, C. W., Frey, R. M., & Labouvie, E. (1996). Modeling therapeutic response to 12-step treatment: Optimal responders, nonresponders, partial responders. *Journal of Substance Abuse*, 8(1), 45-59. Caldwell, P.E., & Cutter, H.S. (1998). Alcoholics Anonymous affiliation during early recovery. *Journal of Substance Abuse Treatment*, 15, 221-228.

569. Morgenstern, J., Kahler, C.W., Frey, R.M., & Labouvie, E. (1996). Modeling therapeutic response to 12-step treatment: Optimal responders, nonresponders, partial responders. *Journal of Substance Abuse*, 8(1), 45-59.

570. White, W., & Kurtz, E. (2006b). *Linking addiction treatment and communities of recovery: A primer for addiction counselors and recovery coaches*. Pittsburgh, PA: Institute for Research, Education and Training in Addictions; White, W. (2008). Toward a philosophy of choice: A new era of addiction treatment. *Counselor*, 9(1), 38-43.

571. Morgenstern, J., Labouvie, E., McCray, B. S., Kahler, C. W., & Frey, R. M. (1997). Affiliation with Alcoholics Anonymous after treatment: A study of its therapeutic effects and mechanisms of action. *Journal of Consulting and Clinical Psychology*, 65(5), 768-777.

572. Moos, R.H. (2008). Active ingredients of substance use-focused self-help groups. *Addiction*, 103, 387-396.

573. Kelly, J.F., Myers, M.G., & Brown, S.A. (2000). A multivariate process model of adolescent 12-step attendance and substance use outcome following inpatient treatment. *Psychology of Addictive Behaviors*, 14, 376-389.

574. Zemore, S.E. (2007). A role for spiritual change in the benefits of 12-step involvement. *Alcoholism: Clinical and Experimental Research*, 31, 76S-79S.

575. Humphreys, K., Mankowski, E., Moos, R., & Finney, J. (1999). Do enhanced friendship networks and active coping mediate the effect of self-help groups on substance abuse? *Annals of Behavioral Medicine*, 21(1), 54-60.

576. Morgenstern, J., Labouvie, E., McCray, B.S., Kahler, C.W., & Frey, R.M. (1997). Affiliation with Alcoholics Anonymous after treatment: A study of its therapeutic effects and mechanisms of action. *Journal of Consulting and Clinical Psychology*, 65(5), 768-777; Bogenschutz, M.P., Tonigan, J.S., & Miller, W.R. (2006). Examining the effects of alcoholism typology and AA attendance on self-efficacy as a mechanism of change. *Journal of Studies on Alcohol*, July, 562-567.

577. Longabaugh, R., Wirtz, P.W., Zweben, A., & Stout, R.L. (1998). Network support for drinking, Alcoholics Anonymous and long-term matching efforts. *Addiction*, 93, 1313-1333; Longabaugh, R., Wirtz, P.W., Zweben, A., & Stout, R.L. (2001). Network support for drinking. In R. Longabaugh & P.W. Wirtz (Eds.), *Project MATCH hypotheses: Results and causal chain analyses* (NIAAA Project MATCH Monograph Series, Vol. 8, NIH Publication No. 01-4238; pp. 260-275). Washington: Government Printing Office; Bond, J., Kaskutas, L.A., & Weisner, C. (2003). The persistent influence of social networks and Alcoholics Anonymous on abstinence. *Journal of Studies on Alcohol*, 64(4), 579-588; Laudet, A.B., Cleland, C.M., Magura, S., Vogel, H.S., & Knight, E.L. (2004). Social support mediates the effects of dual-focus mutual aid groups on abstinence from substance use. *American Journal of Community Psychology*, 34, 175-185; Humphreys, K., & Nock, J. (1997). The influence of post-treatment mutual help group participation on the friendship networks of substance abuse patients. *American Journal of Community Psychology*, 25(1), 1-16; Humphreys, K., Mankowski, E., Moos, R., & Finney, J. (1999). Do enhanced friendship networks and active coping mediate the effect of self-help groups on substance abuse? *Annals of Behavioral*

Problems of Weak Linkage and Attrition

The positive findings of AA and other recovery mutual aid involvement are offset by weak relationships between treatment institutions and local mutual aid groups,⁵⁸⁵ passive rather than assertive linkage to such groups by addiction professionals,⁵⁸⁶ and high (40-70%) progressive dropout rates from such groups in the first year.⁵⁸⁷

As many as 50% of clients who complete primary treatment for a substance use disorder do not attend a single recovery support meeting following discharge from treatment,⁵⁸⁸ and 40-60 % of clients who begin participation in Twelve Step groups discontinue participation in the 9-12 months following treatment discharge.⁵⁸⁹ The post-treatment outcomes of individuals who stop attending support meetings, or who only attend them sporadically, descend to the levels of outcome of those who report never regularly attending.⁵⁹⁰

*Given that more than 80% of individuals who obtained help eventually participated in AA, but that about half of them dropped out, interventions should focus on enhancing continuation in AA and on identifying other mutual help groups that may provide similar benefit.*⁵⁹¹

Problems of linkage and engagement are particularly pronounced for young people.⁵⁹² Studies of post-treatment adolescent participation in Twelve Step groups report similar attrition problems.⁵⁹³ Adults leaving addiction treatment are twice as likely to attend Twelve Step meetings in the first three months than are adolescents discharged from addiction treatment.⁵⁹⁴ Peer-based recovery support services provide a connecting bridge between professional treatment and indigenous recovery communities.

Assertive linkage to communities of recovery early in the treatment process can increase affiliation and participation rates for adults⁵⁹⁵ and adolescents⁵⁹⁶ following treatment, but such assertive procedures do not constitute a mainstream treatment practice.

Linking clients to particular recovery support groups and meetings has been recommended⁵⁹⁷ and is indicated by studies finding that adolescents who attend recovery support groups with higher proportions of young people in attendance have higher meeting attendance rates and better long-term recovery outcomes than adolescents attending groups with primarily adult members.⁵⁹⁸ Clients also differ in their degree of religiosity and spiritual orientation and can benefit from being matched with programs that are congruent with their degree of, or absence of, such orientation.⁵⁹⁹

Medicine, 27(1), 54-60; Kaskutas, L.A., Bond, J., & Humphreys, K. (2002). Social networks as mediators of the effects of Alcoholics Anonymous, *Addiction*, 97(7), 891-900.

578. Pagano, M.E., Friend, K.B., Tonigan, J.S., & Stout, R.L. (2004). Helping others in Alcoholics Anonymous and drinking outcomes: Findings from Project MATCH. *Journal of Studies on Alcohol*, 65, 766-773.

579. Zemore, S.E., Kaskutas, L.E., & Ammon, L.N. (2004). In 12-step groups, helping helps the helper. *Addiction*, 99, 1015-1023.

580. Moos, R.H. (2008). Active ingredients of substance use-focused self-help groups. *Addiction*, 103, 387-396.

581. Kaskutas, L.A., Bond, J., & Humphreys, K. (2002). Social networks as mediators of the effects of Alcoholics Anonymous, *Addiction*, 97(7), 891-900.

582. Moos, R.H. (2008). Active ingredients of substance use-focused self-help groups. *Addiction*, 103, 387-396.

583. Cross, G.M., Morgan, C.W., Mooney, A.J., Martin, C.A., & Rafter, J.A. (1990). Alcoholism treatment: A ten-year follow-up study. *Alcoholism: Clinical and Experimental Research*, 14, 169-173.

584. Nealon-Woods, M.A., Ferrari, J.R., & Jason, L.A. (1995). Twelve-step program use among Oxford House residents: Spirituality or social support in sobriety? *Journal of Substance Abuse*, 7, 311-318.

585. White, W., & Hagen, R. (2005). Treatment, recovery, community: A call for reconnection. *Counselor*, 6(6), 52-56.

586. Forman, R.F. (2002). One AA meeting doesn't fit all: 6 keys to prescribing 12-step programs. *Psychiatry Online*, 1(10), 1-6.

587. Tonigan, J.S., Miller, W.R., Chavez, R., Porter, N., Worth, L., Westphal, V., Carroll, L., Repa, K., Martin, A., & Tracy, L.A. (2002). AA participation 10 years after Project MATCH treatment: Preliminary findings. *Alcoholism: Clinical and Experimental Research*, 26(Suppl), 42A; Tonigan, J.S., Connors, G.J., & Miller, W.R. (2003). Participation and involvement in Alcoholics Anonymous. In T.F. Babor & F.K. Del Boca (Eds.), *Treatment matching in alcoholism* (pp. 184-204). Cambridge, UK: Cambridge University Press; Kelly, J.F., & Moos, R. (2003). Dropout from 12-step self-help groups: Prevalence, predictors, and counteracting treatment influences. *Journal of Substance Abuse Treatment*, 24(3), 241-250. Donovan, D.M., & Wells, E.A. (2007). "Tweaking 12-Step": The potential role of 12-step self-help group involvement in methamphetamine recovery. *Addiction*, 102(Suppl 1), 121-129.

588. Humphreys, K., Huebsch, P.D., Finney, J.W., & Moos, R.H. (1999). A comparative evaluation of substance abuse treatment: V. Substance abuse treatment can enhance the effectiveness of self-help groups. *Alcoholism: Clinical and Experimental Research*, 23, 558-563; Laudet, A., & Sands, B. (2007). An exploration of the effect of on-site 12-Step meetings on post-treatment outcomes among polysubstance-dependent clients. *Evaluation Review*, 31(6), 613-646.

589. Tonigan, J.S., Connors, G.J., & Miller, W.R. (2003). Participation and involvement in Alcoholics Anonymous. In T.F. Babor & F.K. Del Boca (Eds.), *Treatment matching in alcoholism* (pp. 184-204). Cambridge, UK: Cambridge University Press; Kelly, J.F., & Moos, R. (2003). Dropout from 12-step self-help groups: Prevalence, predictors, and counteracting treatment influences. *Journal of Sub-*

Role of Clinician Attitudes

Clinician attitudes play a critical role in determining whether clients in treatment initiate participation in recovery support groups.⁶⁰⁰ Counselors may, however, overestimate their understanding of mechanisms of change involved in Twelve Step recovery because of the ubiquitous presence of references to Twelve Step groups and Twelve Step slogans.⁶⁰¹ Given their varied preparatory pathways and high turnover rates, addiction counselors may lack in-depth knowledge of Twelve Step programs and even a general understanding of alternative recovery support groups and recovery support institutions.⁶⁰²

LINKAGE TO COMMUNITIES OF RECOVERY:

POTENTIAL STRATEGIES TO ENHANCE RECOVERY OUTCOMES

- Emphasize the critical nature of mutual aid participation for persons with heavy alcohol/drug-using social networks.⁶⁰³
- Demonstrate “informational parity” by distributing information on the full range of recovery mutual aid alternatives.⁶⁰⁴
- Orient clients to the varieties of support groups, inform them of research findings on their role in recovery, and educate them on what to expect in such meetings.⁶⁰⁵
- Engage clients in discussions of responses to various meeting formats, application of program principles to current circumstances, status of sponsorship relationships, and fellowship-related service and social activities.⁶⁰⁶
- Focus on youth and adults with the most severe AOD problems for intensified linkage, monitoring, and support related to their mutual aid involvement.⁶⁰⁷
- Use “systematic encouragement” (call by the client to recovery support group in the presence of the counselor, mutual introduction between the client and group member over the phone to arrange transport to the first meeting, with the same group member calling before the meeting to encourage attendance) rather than passive referral (verbal encouragement to attend and provision of a list of meetings).⁶⁰⁸

stance Abuse Treatment, 24(3), 241-250; Laudet, A., & Sands, B. (2007). An exploration of the effect of on-site 12-Step meetings on post-treatment outcomes among polysubstance-dependent clients. *Evaluation Review*, 31(6), 613-646.

590. Kisson, W., McLeod, C., & McKay, J. (2003). The longitudinal relationship between self-help group attendance and course of recovery. *Evaluation and Program Planning*, 26, 311-323.

591. Moos, R.H., & Moos, B.S. (2005a). Paths of entry into Alcoholics Anonymous: Consequences for participation and remission. *Alcoholism: Clinical and Experimental Research*, 29(10), 1858-1868.

592. Kelly, J.F., Myers, M.G., & Brown, S.A. (2000). A multivariate process model of adolescent 12-step attendance and substance use outcome following inpatient treatment. *Psychology of Addictive Behaviors*, 14, 376-389.

593. Kelly, J.F., Myers, M.G., & Brown, S.A. (2002). Do adolescents affiliate with 12-step groups? A multivariate process model of effects. *Journal of Studies on Alcohol*, 63, 293-304.

594. Godley, M.D., Godley, S.H., Dennis, M.L., Funk, R.R., & Passetti, L.L. (2005). A review of unusual, innovative and assertive continuing care approaches. Presented at the 2005 Joint Meeting on Adolescent Treatment Effectiveness (JMATE), Washington, D.C.

595. Sisson, R.W., & Mallams, J.H. (1981). The use of systematic encouragement and community access procedures to increase attendance at Alcoholics Anonymous and Al-Anon meetings. *American Journal of Drug and Alcohol Abuse*, 8, 371-376; McCrady, B.S., Epstein, E.E., & Hirsch, L.S. (1999). Maintaining change

after conjoint behavioral alcohol treatment for men: Outcomes at six months. *Addiction*, 94, 1381-1396; Timko, C., DeBenedetti, A., & Billow, R. (2006). Intensive referral to 12-step self-help groups and 6-month substance use disorder outcomes. *Addiction* 101, 678-688; Etheridge, R.M., Craddock, S.G., Hubbard, R.L., & Rounds-Bryant, J.L. (1999). The relationship of counseling and self-help participation to patient outcomes in DATOS. *Drugs and Alcohol Dependence*, 57, 99-112; Timko, C., & DeBenedetti, A. (2007). A randomized controlled trial of intensive referral to 12-step self-help groups: One-year outcomes. *Drug and Alcohol Dependence*, 90, 270-279.

596. Passetti, L.L., Godley, S.H., & White, M.K. (in press). Adolescents' perceptions of friends during substance abuse treatment: A qualitative study. *Contemporary Drug Problems*.

597. White, W., & Kurtz, E. (2006b). *Linking addiction treatment and communities of recovery: A primer for addiction counselors and recovery coaches*. Pittsburgh, PA: Institute for Research, Education and Training in Addictions.

598. Kelly, J.F., Myers, M.G., & Brown, S.A. (2005). The effects of age composition of 12-step groups on adolescent 12-step participation and substance use outcome. *Journal of Child and Adolescent Substance Abuse*, 15, 63-72; Kelly, J.F., & Myers, M.G. (1997). Adolescent treatment outcome in relation to 12-step group attendance. Abstracted in *Alcoholism: Clinical and Experimental Research*, 21, 27A.

599. Atkins, R.G., & Hawdon, J.E. (2007). Religiosity and participation in mutual-aid support groups for addiction. *Journal of Substance Abuse Treatment*, 33, 321-331.

- Encourage sampling of recovery support groups and meeting formats.⁶⁰⁹
- Maintain a list of local recovery support group members willing to transport and guide a client into his or her first meeting experience.⁶¹⁰
- Assertively linking clients to recovery support groups during treatment, rather than at the end of or following treatment.⁶¹¹
- Matching clients to groups based on gender, age, attitude toward spirituality, smoking status, and drug choice.⁶¹²
- Resolve any obstacles to ongoing participation, e.g., transportation, child care.⁶¹³
- Host on-site recovery support meetings at treatment facilities.⁶¹⁴
- Facilitate involvement in activities beyond meeting attendance, e.g., reading literature, getting a sponsor, initiating sober friendships, participating in social events such as dances and parties, service work.⁶¹⁵
- Improve supportiveness and goal-directedness of organizational work environment.⁶¹⁶

600. Laudet, A., & White, W. (2005). An exploratory investigation of the association between clinicians' attitudes toward twelve-step groups and referral rates. *Alcoholism Treatment Quarterly*, 23(1), 31-45.

601. Chappel, J., & DuPont, R. (1999). Twelve-step and mutual-help programs for addictive disorders. *Addictive Disorders*, 22(2), 425-446.

602. Kurtz, E., & White, W. (2007). *Telephone- and Internet-based recovery support services*. Chicago, IL: Great Lakes Addiction Technology Transfer Center.

603. Longabaugh, R., Wirtz, P.W., Zweben, A., & Stout, R.L. (1998). Network support for drinking, Alcoholics Anonymous and long-term matching efforts. *Addiction*, 93, 1313-1333; Kaskutas, L.A., Bond, J., & Humphreys, K. (2002). Social networks as mediators of the effects of Alcoholics Anonymous. *Addiction*, 97(7), 891-900.

604. Humphreys, K., Wing, S., McCarty, D., Chappel, J., Galant, L., Haberle, B., Horvath, A.T., Kaskutas, L.A., Kirk, T.K., Kivlahan, D., Laudet, A., McCrady, B.S., McLellan, A.T., Morgenstern, J., Townsend, M., & Weiss, R. (2004). Self-help organizations for alcohol and drug problems: Toward evidence-based practice and policy. *Journal of Substance Abuse Treatment*, 26(3), 151-158; Kurtz, E., & White, W. (2007). *Telephone- and Internet-based recovery support services*. Chicago, IL: Great Lakes Addiction Technology Transfer Center.

605. Timko, C., Billow, R., & DeBenedetti, A. (2006). Determinants of 12-step affiliation and moderators of the affiliation-abstinence relationship. *Drug and Alcohol Dependence*, 83, 111-121; Kurtz, E., & White, W. (2007). *Telephone- and*

Internet-based recovery support services. Chicago, IL: Great Lakes Addiction Technology Transfer Center; Kahler, C.W., Read, J.P., Ramsey, S.E., Stuart, G.L., McCrady, B., & Brown, R.A. (2004). Motivational enhancement for 12-step involvement among patients undergoing alcohol detoxification. *Journal of Consulting and Clinical Psychology*, 72, 736-741.

606. Morgan, O.J. (1995a). Extended length sobriety: The missing variable. *Alcoholism Treatment Quarterly*, 12(1), 59-71.

607. Kelly, J.F., Myers, M.G., & Brown, S.A. (2002). Do adolescents affiliate with 12-step groups? A multivariate process model of effects. *Journal of Studies on Alcohol*, 63, 293-304.

608. Sisson, R.W., & Mallams, J.H. (1981). The use of systematic encouragement and community access procedures to increase attendance at Alcoholics Anonymous and Al-Anon meetings. *American Journal of Drug and Alcohol Abuse*, 8, 371-376; Timko, C., DeBenedetti, A., & Billow, R. (2006). Intensive referral to 12-step self-help groups and 6-month substance use disorder outcomes. *Addiction* 101, 678-688; Timko, C., & DeBenedetti, A. (2007). A randomized controlled trial of intensive referral to 12-step self-help groups: One-year outcomes. *Drug and Alcohol Dependence*, 90, 270-279.

609. Donovan, D. (1998). Continuing care: Promoting maintenance of change. In W.R. Miller & N. Heather (Eds.), *Treating addictive behaviors* (2nd ed., pp. 317-336). New York: Plenum Press; Tonigan, J.S., Miller, W.R., & Schermer, C. (2002). Atheists, agnostics and Alcoholics Anonymous. *Journal of Studies on Alcohol*, 63, 534-541.

TABLE 9: POTENTIAL RECOVERY-LINKED PERFORMANCE MEASURES

PERFORMANCE AREA	SAMPLE RECOVERY-LINKED PERFORMANCE MEASURES
Support Group Availability	<p>Number of local recovery mutual aid societies</p> <p>Number of local recovery support meetings per week</p> <p>Number of recovery volunteers</p>
Staff Knowledge of Recovery Support Groups	<p>Percentage of direct service staff who have attended a local recovery support meeting in past 90 days</p> <p>Documentation of staff training on alternative recovery pathways</p> <p>Review the clinical chart of each client to verify use of philosophy of choice</p>
Institutional Linkages to Communities of Recovery	<p>Number of meetings between local recovery mutual aid group service committees in past quarter</p> <p>Number of volunteers from local recovery support groups who have participated in in-treatment client education in the past month</p>
Effectiveness of Linkage Procedures	<p>Percentage of clients who report recovery support group participation 3 months, 6 months, and 12 months following treatment</p> <p>Number of clients linked to alternative meetings or support societies after exposure to their initial choice</p>

610. Johnson, N.P., & Chappel, J.N. (1994). Using AA and other 12-step programs more effectively. *Journal of Substance Abuse Treatment*, 11, 137-142.

611. Etheridge, R.M., Craddock, S.G., Hubbard, R.L., & Rounds-Bryant, J.L. (1999). The relationship of counseling and self-help participation to patient outcomes in DATOS. *Drugs and Alcohol Dependence*, 57, 99-112; Kelly, J.F., & Moos, R. (2003). Dropout from 12-step self-help groups: Prevalence, predictors, and counteracting treatment influences. *Journal of Substance Abuse Treatment*, 24(3), 241-250.

612. Forman, R.F. (2002). One AA meeting doesn't fit all: 6 keys to prescribing 12-step programs. *Psychiatry Online*, 1(10), 1-6.

613. Johnson, N.P., & Chappel, J.N. (1994). Using AA and other 12-step programs more effectively. *Journal of Substance Abuse Treatment*, 11, 137-142.

614. Laudet, A., & Sands, B. (2007). An exploration of the effect of on-site 12-Step meetings on post-treatment outcomes among polysubstance-dependent clients. *Evaluation Review*, 31(6), 613-646.

615. Kelly, J.F., & Moos, R. (2003). Dropout from 12-step self-help groups: Prevalence, predictors, and counteracting treatment influences. *Journal of Substance Abuse Treatment*, 24(3), 241-250; Weiss, R.D., Griffin, M.L., Gallop, R.G., Najavits, L.M., Frank, A., Crits-Christoph, P., Thase, M.E., Blaine, J., Gastfriend, D.R., Daley, D., & Luborsky, L. (2005). The effect of 12-step self-help group attendance and participation on drug use outcomes among cocaine-dependent patients. *Drug and Alcohol Dependence*, 77, 177-184.

616. Moos, R.H., & Moos, B.S. (1998). The staff workplace and the quality and outcomes of substance abuse treatment. *Journal of Studies on Alcohol*, 59, 43-51.