Assertive Community Treatment for People with Severe Mental Illness

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Effectiveness of Assertive Community Treatment

Assertive community treatment (ACT) is an approach to community care that was developed by Leonard Stein and Mary Ann Test and their colleagues in Madison, Wisconsin, in the 1970s (Stein & Test, 1980, 1985). The original program, called Training in Community Living, was later named *Program of Assertive Community Treatment* (PACT). For more than two decades, PACT has been regarded as a model of exemplary mental health practice (Dixon, 2000). Over that time, approaches adopting PACT principles have proliferated worldwide, with a variety of different names, such as *the full service model* (Solomon, 1992), *assertive outreach, mobile treatment teams,* and *continuous treatment teams.* The most widely used label for programs sharing the core ingredients of the PACT model is ACT, and that is the label used on this BHRM Web site. The guidelines described below summarize the consensus view of the critical ingredients of ACT (McGrew & Bond, 1995).

ACT is often viewed as a way of organizing services to provide concrete help essential for the community integration of clients with severe mental illness (SMI). One way in which ACT differs from many traditional services is by the emphasis on a team approach. An ACT program consists of a multidisciplinary group of mental health professionals who work as a team. Another distinctive feature is that most ACT contacts occur in community settings. ACT teams have a holistic approach to services, providing help with medications, housing, finances, and anything else critical to an individual's success in living.

ACT is one of the six practices identified as evidence-based practices by the Implementing Evidence-Based Practice Project (Drake et al., 2000; Phillips et al., 2001). It is one of the most extensively researched models of community care for people with severe mental illness. The evidence for the effectiveness of ACT is quite consistent across numerous reviews that have appeared in the literature (e.g., Bedell, Cohen, & Sullivan, 2000; Bond, Drake, Mueser, & Latimer, 2001; Latimer, 1999; Marshall & Creed, 2000; Mueser, Bond, Drake, & Resnick, 1998; Ziguras & Stuart, 2000). Bond et al. (2001) have summarized outcomes from 25 randomized controlled trials of ACT. They concluded that, compared to usual community care, ACT is highly successful in engaging clients in treatment, substantially reduces psychiatric hospital use, increases housing stability, and moderately improves symptoms and subjective quality of life.

Mental health planners are increasingly attentive to the need to establish program standards and monitor implementation. Based on the premise that better implemented ACT

programs have better client outcomes, it becomes critical to develop methods for assessing whether programs follow the ACT model. *Fidelity* is the term used to denote adherence to the standards of a program model, and a measure used to assess the degree to which a specific program meets the standards for a program model is known as a *fidelity scale* (Bond, Evans, Salyers, Williams, & Kim, 2000). Using different ACT fidelity scales, several studies have suggested that programs that more carefully implemented ACT programs have better outcomes (Latimer, 1999; McGrew, Bond, Dietzen, & Salyers, 1994; McHugo, Drake, Teague, & Xie, 1999). These fidelity studies have further bolstered the argument that ACT is an evidence-based practice.

Negative outcomes from ACT. The ACT literature has been very consistent in suggesting an *absence* of negative outcomes. Significantly, surveys suggest that clients are mostly satisfied with ACT services (McGrew, Wilson, & Bond, 1996) to a greater extent than clients receiving usual services (Mueser et al., 1998). Satisfaction with ACT services is similar for individuals of different backgrounds (Calsyn, Morse, Klinkenberg, Yonker, & Trusty, in press).

Nevertheless, it is worth noting that some critics of the ACT model (Gomory, 2001) argue that ACT programs are coercive or paternalistic and that conversely, they are not based on client choice. This criticism is based mostly on anecdotes and theoretical arguments, rather than empirical studies. Apparently only a small minority of ACT clients – 11% in one study (McGrew, Wilson, & Bond, submitted) – believe ACT services are too intrusive or confining, or that they foster dependency. Moreover, complaints about ACT services are more frequent in ACT programs that are low in fidelity (McGrew et al., submitted).

ACT teams daily confront many thorny conflicts between the best interests of clients and their expressed preferences (Diamond & Wilder, 1985). One large-scale survey of ACT teams examining use of *therapeutic limit setting* (interventions to pressure clients to change disturbing or destructive behavior or to stay in treatment) found that case managers reported using a variety of techniques, ranging from simply ignoring a behavior or using verbal encouragement to assigning a representative payee or committing a client to the hospital against their will (Neale & Rosenheck, 2000). Verbal persuasion was widely used, whereas the more coercive interventions were used with less than 10% of the clients. Case managers were more active in setting limits with clients who had more extensive hospitalization histories, more symptoms, more arrests, and more recent substance use.

The assertion that ACT limits client choice is contrary to what many ACT clients have actually experienced. By helping clients avoid hospitalization (including involuntary commitments), ACT enables them to live more normal lives and in this respect ACT increases client choice. Moreover, ACT teams often expand the range of opportunities for consumers, with respect to where they can live, whether or not they can find work, and whether they have an income.

Clinical Guidelines for ACT

The developers of the ACT model provided very clear and specific criteria for its critical ingredients (Test & Stein, 1976). Although ACT has been modified and extended over the past two decades, Stein and Test's original formulation has been remarkably enduring (Dixon, 2000). The best-known of guidelines for establishing an ACT team is given in what is commonly referred to as the "PACT Start-up Manual" (Allness & Knoedler, 1998). These standards can also be found at http://www.nami.org/about/pactfidelity.html; they are among the most demanding of published standards (Lewin Group, 2000). Different states have developed their own program standards; for example, Indiana's standards can be found at http://psych.iupui.edu/ACTCenter/Standards.pdf. The Dartmouth ACT Fidelity Scale (DACTS; see attached), a tool for monitoring the fidelity of implementation of ACT (Teague, Bond, & Drake, 1998), has proven to be a useful method for communicating program standards (Salyers et al., submitted).

Some essential features of ACT include:

- **Multidisciplinary staffing.** An ACT team consists of mental health professionals representing different disciplines essential for the comprehensive care of people with SMI. Fully-staffed ACT teams include psychiatrists, nurses, social workers, employment specialists, and substance abuse counselors.
- **Integration of services**. In most places, the social service system is fragmented, with different agencies and programs responsible for different aspects of the client's care. Through the multidisciplinary team, the ACT team provides an integrated approach in which treatment issues (medications, physical health care, symptom control), rehabilitation issues (e.g., employment, activities of living, interpersonal relationships, housing), substance abuse treatment, practical assistance, social services, family services, and other services are tailored to the needs and goals of each client.

The advantages of integrated approaches over *brokered* approaches (i.e., referring clients to other programs for services) are well documented (Bond, 1998; Drake, Becker, Xie, & Anthony, 1995; Rosenheck et al., 1998).

- **Team approach.** ACT teams have shared caseloads in which several team members are in frequent contact with each client. The ACT team meets daily to discuss clients, problem-solve, and plan treatment and rehabilitation efforts. The entire team has responsibility for each client, with different team members contributing their expertise as appropriate. One advantage to the team approach is increased continuity of care over time (Test, 1979; Ware, Tugenberg, Dickey, & McHorney, 1999). The team approach also appears to reduce staff burnout (Boyer & Bond, 1999; Salyers, 1997).
- **Low client-staff ratios.** Client-staff ratios are small enough to ensure adequate individualization of services. The 10:1 ratio has been frequently used as a rule of thumb. In recent years it has been increasingly recognized that the caseload ratio needs to take into account caseload characteristics. For clients with the most debilitating conditions, an even smaller ratio may be optimal, whereas for clients who are more stable, a ratio of 20:1 may be appropriate (Ryan, Sherman, & Bogart, 1997; Salyers, Masterton, Fekete, Picone, & Bond, 1998). When caseloads are too large, case management services are clearly ineffective (Björkman & Hansson, 2000; Franklin, Solovitz, Mason, Clemons, & Miller, 1987; King, Le Bas, & Spooner, 2000).
- **Locus of contact in the community.** All members of the ACT team make home visits. Most contacts with clients and others involved in their treatment (such as family members) occur in clients' homes or in community settings, not in mental health offices. A rule of thumb is that 80% or more of contacts should be out of the office, recognizing that some types of office contact are appropriate. Stein and Test hypothesized that *in vivo* contacts – that is, contacts in the natural settings in which clients live, work, and interact with others – would be more effective than in hospital or office settings, because skills taught in the hospital or clinic do not generalize (Dilk & Bond, 1996; Stein, 1988). In addition, assessment in real world settings is more valid than office-based assessments (Bond & Friedmeyer, 1987), because practitioners can observe behavior directly rather than depend on client self-report. Home

visits also facilitate medication delivery, problem-solving, crisis intervention, and networking.

- **Medication management**. A top priority for ACT is effective use of medications, which necessitates careful assessments of diagnosis and target symptoms, well-reasoned choices of medications (including the novel antipsychotics), appropriate dosing and duration of therapy, and management of side effects, in accordance with evidence-based practice guidelines (Mellman et al., 2001). ACT teams are involved in the delivery of medications for clients when this assistance increases appropriate use of medications.
- **Focus on everyday problems in living**. ACT teams focus on a wide range of ordinary daily activities and chores, depending on a client's most pressing needs; e.g., securing housing, meeting appointments, cashing checks, and shopping. ACT teams also help clients learn to develop skills and supports in natural settings (Witheridge, 1991).
- **Rapid access**. ACT teams differ sharply from most social services in that they respond quickly to client emergencies, even when they occur after regular business hours. Stein and Test envisioned this program element to include 24-hour coverage. Witheridge (1991) suggested that "staff often find ways to anticipate trouble and keep crises from erupting" (pp. 55-56), suggesting that the need for 24-hour coverage may be curtailed in a proactive ACT team.
- **Assertive outreach.** ACT teams are persistent in engaging reluctant clients, both in the initial stages and after they are enrolled. ACT teams do not automatically terminate clients who miss appointments. Outreach stresses relationship-building (McGrew et al., 1996) and tangible help, especially around finances and housing (Bond et al., 1990). Some ACT teams have a client assistance fund to pay for emergency expenses (Bond et al., 1989).
- **Individualized services**. Treatments and supports are individualized to accommodate the needs and preferences of clients with SMI, who represent a very heterogeneous population. Because of a broad knowledge of community resources and the wherewithal to access them, ACT teams often increase options available to clients beyond what they would otherwise have; for example, in choosing where they live (Witheridge, 1991).

- **Time-unlimited services**. In the Madison PACT program, clients do not "graduate" from the program when their situation stabilizes, but continue to receive ACT assistance on a lifelong basis. This allows for the development of long-term, stable, trusting therapeutic relationships. This principle follows from studies suggesting that clients regressed when they were terminated from intensive short-term programs (Test, Knoedler, & Allness, 1985). As discussed below, there is growing consensus that this principle should be modified for clients who show substantial improvement.

As noted earlier, ACT is often regarded as an organizational framework for delivering services rather than the services themselves. Increasingly, practice guidelines for ACT have incorporated major evidence-based practices such as illness management (Mueser et al., submitted), medication guidelines (Mellman et al., 2001), supported employment (Bond et al., 2001), integrated treatment for dual disorders (Drake et al., 2001), and family psychoeducation (Dixon et al., 2001). One great advantage to ACT is that it is completely compatible with these evidence-based practices; in fact, preliminary work in conceptualizing and developing several of these practices first occurred within the context of ACT teams.

Target population. Most authorities now agree that it is neither practical nor necessary to provide ACT programs universally to all clients with SMI. Instead, ACT is best suited for clients who do not effectively use office-based mental health services (Latimer, 1999). Historically, the most common method for defining admission criteria was frequent or extensive use of psychiatric hospitals (Witheridge, Dincin, & Appleby, 1982). Marshall and Creed (2000) have identified three ways in which ACT teams have been conceptualized, each revolving around admission criteria. The first is to facilitate the discharge of long-term inpatients, a strategy that has gained renewed currency with the closing and downsizing of state and provincial hospitals (Hadley, Turk, & McGurrin, 1997; Rothbard, Kuno, Schinnar, Hadley, & Turk, 1999). The second is as an alternative to admission for acutely ill patients – so-called "deflection" programs (Bond et al., 1989; Stein & Test, 1980). Problems with deflection teams include potentially high staff burnout and concerns about safety (Marshall, 1999). The third and most popular use is to maintain unstable long-term clients ("revolving-door" clients) in the community.

Most ACT programs target individuals with SMI who do not respond well to less intensive care modalities (e.g., they fail to keep office appointments) and who are frequent users of emergency psychiatric services, especially inpatient care. Some programs specialize

further by outreach to the homeless (Lehman et al., 1999; Morse, Calsyn, Allen, Tempelhoff, & Smith, 1992), clients dually diagnosed with mental illness and substance use disorders (Drake et al., 1998), or those entangled with the criminal justice system (Draine & Solomon, 1999; Gold Award, 1999, 2001; Solomon & Draine, 1995; Steadman et al., 1999).

What percentage of clients with SMI receiving mental health services needs ACT services? Leonard Stein (personal communication, 6/19/00) estimates that in a well-functioning mental health system, approximately 20% of clients with SMI would need ACT services. If the service system is deficient, more ACT teams may be required to fill service gaps.

Implementing ACT programs. Drake et al. (2000) have outlined basic steps needed to implement any evidence-based practice, including ACT. The steps include making systematic efforts to identify key stakeholders in a community and to build consensus (McFarlane, McNary, Dixon, Hornby, & Cimett, 2001), locating appropriate funding mechanisms, identifying leadership within an organization, and developing a plan for implementation that includes training and monitoring (Phillips et al., 2001).

State mental health authorities have an important role in the success of implementation of ACT programs (Lewin Group, 2000). States that have established standards that define requirements for accrediting ACT programs have done so with the intent of increasing program fidelity. Another role for state mental health authorities is to help ensure stable and adequate funding. In some states this has necessitated the arduous process of revising the state Medicaid plan (News & Notes, 1999).

At the agency level, careful decisions about staff hiring, especially for supervisory positions, are an important element in the success of an ACT team (Rapp, 1992). ACT teams work best when they admit clients at a controlled rate. Commitment from all levels of the organization, including the patience to enduring the inevitable challenges and ambiguities of the start-up phase, is also necessary. Ongoing monitoring of program implementation is another critical step in successful implementation (Bond et al., 2000).

Fortunately, numerous resources are emerging to help in the implementation of ACT. In recent years, detailed practice manuals have become available (Allness & Knoedler, 1998; Stein & Santos, 1998). In addition, the Implementing Evidence-Based Practice Project is developing implementation materials that will provide aids to implementation, including materials translated into Spanish (Phillips et al., 2001). The National Alliance for the Mentally Ill (NAMI) has a technical assistance center funded by the Center for Mental Health

Services (CMHC) of the Substance Abuse and Mental Health Services Administration to promote ACT dissemination, and has given special attention to the methods for building consensus in a community among family members and consumers.

Some states, such as Illinois and Indiana, have technical assistance centers to help in the process of implementation. These centers can help guide program planners through the critical steps. As a simple overview, the ACT Center of Indiana suggests several basic steps to help centers get started in the implementation process, as summarized on its Web site: www.psych.iupui.edu/ACTCenter/GettingStarted.htm .

Contraindications for use. Evidence from both research and clinical practice suggests that ACT is very flexible across a wide range of clients. Its effectiveness has been reported for clients from many different cultural backgrounds. ACT is ideally suited for young adults (Test et al., 1995) as well as for older adults. Differences in gender, education, and other such background characteristics have not been reported as factors limiting the effectiveness of ACT. Moreover, as noted above, background characteristics do not predict what types of clients are more satisfied with ACT services (Calsyn et al., in press).

One of the appealing features of ACT is adaptability for many different types of clients who do *not* benefit from conventional services, as discussed above. Based on cost considerations, ACT teams are not recommended for clients who have already attained high levels of self-management of their illness (Latimer, 1999). Based purely on clinical considerations, however, ACT services have been found to be beneficial to clients spanning a wide spectrum of symptom severity and disability (Test, 1992).

ACT also appears to be suitable for clients with a wide range of diagnoses. However, some observers have suggested that clients diagnosed primarily with borderline personality or other personality disorders may not be suitable candidates for an ACT team. Little research has actually studied this question systematically. Weisbrod (1983) found that among clients receiving ACT services, those with personality disorders had higher treatment costs than those with other diagnoses, whereas Neale and Rosenheck (2000) did not find any differences in therapeutic limit setting strategies specific to clients with personality disorders. Clinical anecdotes suggest that ACT teams having a large percentage of clients with primary diagnoses of severe personality disorders may be especially draining for the team, unless the team has additional supports and training.

Some centers use specialty teams devoted to serving clients with borderline personality and related disorders, augmenting the “basic” ACT model with dialectical

behavior therapy, which appears to be the most effective strategy with this population (Swenson, Torrey, & Koerner, 2002). The combined use of ACT and dialectical behavior therapy in this fashion is a promising approach (Gold Award, 1998), but it has not yet been systematically studied.

Step-down ACT programs. Increasingly, program planners have adopted "tiered" case management systems in which different levels of case management intensity are aimed at different levels of client need (Giesler & Hodge, 1998; Sherman & Ryan, 1998). Transferring ACT clients to less intensive case management services appears to be more successful if the transfers are individualized and the "step-down" programs to which clients are transferred are well designed, sharing many of the principles of organization in an ACT team, but at a lesser intensity (Rosenheck & Dennis, in press; Salyers et al., 1998; Sherman & Ryan, 1998).

Resources

A vast literature on ACT is widely available, including practice manuals (Allness & Knoedler, 1998; Stein & Santos, 1998) and videotapes (Harron, 1996; Harron, Burns, & Swartz, 1993). A recently compiled bibliography developed by the ACT Center of Indiana is available at http://psych.iupui.edu/ACTCenter , which also contains a wealth of other background materials. A resource manual, also developed by the ACT Center of Indiana, is available from vbannon@iupui.edu .

Other relevant Web sites include that for the Assertive Community Treatment (ACT) Training Institute (located at the University of Illinois at Chicago): www.psych.uic.edu/mhsrp/act.htm . The ACT Institute uses distance learning methods, with an emphasis on statewide videoconferencing. The Web site for ACTA, which is an international organization for ACT, is found at: http://www.actassociation.com . The NAMI Web site for CMHS-funded PACT Technical Assistance Center is: www.nami.org/about/pact.htm . The New Hampshire-Dartmouth Psychiatric Research Center has a useful Web site, www.dartmouth.edu/dms/psychrc . It contains an extensive list of publications on evidence-based practices that can be ordered online. The Evidence-Based Practices Project Web site, being developed under the supervision of this group, is located at www.mentalhealthpractices.org/ . It will eventually have rich resource material on ACT. The Web site for National Association of State Mental Health Program Directors Research Institute, Inc., located at: www.nasmhpd.org , contains information about their newly-formed Center for Evidence-Based Practices.

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