ACHIEVING HIGH FIDELITY ASSERTIVE COMMUNITY TREATMENT THROUGH THE IMPLEMENTATION OF FIDELITY EVALUATION AND TECHNICAL ASSISTANCE

Lorna Moser, Ph.D.
ACT TA Center
Center for Excellence in Community Mental Health,
UNC Department of Psychiatry
lorna_moser@med.unc.edu

Presented at the NC PIC Meeting, January 24, 2014
Evolution of ACT: Then

- Developed in 1970’s in Madison, WI (Stein & Test)
- Inpatient staff made note of revolving door patients
- “Hospital without walls”
  - Bringing comprehensive supports to individuals where they live
  - Major outcome of interest was decreased hospitalization
- Core elements
  - Team approach ◦ community-based ◦ flexible, comprehensive services ◦ fixed point of responsibility ◦ 24/7 coverage ◦ small ratio consumers to staff ◦ time-unlimited
Typical ACT Service Recipient

- Schizophrenia-spectrum disorder, bipolar disorder, or major depressive disorder with psychotic features; and
- Significant functional impairments and;
- One or more of the following:
  - Comorbid substance abuse; and/or
  - Hx of frequent or long-term hospitalizations; and/or
  - Hx of frequent arrests/incarcerations or homelessness episodes.
- Have not (or likely would not) successfully received services from less intensive community based treatment programs
ACT IS AN ORGANIZATIONAL PLATFORM

What gets “plugged in” will always be evolving
Evolution of ACT: Now

- Core elements still remain, as well as primary target population, although…
  - greater attention to transition from ACT
  - piloting of ACT with special populations
- Changing landscape
  - New Targets
    - Hospitalization is less of a focus
    - Growth-oriented outcomes reflecting community integration, transition, and recovery
  - New Technology
    - Evidence-based practices and implementation science

Treatment should align with chosen outcomes
The Basic Charge of ACT Is…

To be the first-line, if not sole, provider of all the services that ACT individuals need.

- Necessitates a multidisciplinary team
- Collaboration and trans-disciplinary approach

To provide flexible, individualized services reflecting what we know to work

- Tailored to individual needs, short and long-term
- Delivered in individual’s communities/lives

To be recovery-oriented

- Treatment driven by individual’s goals
- Emphasis on growth and possibilities
ACT as an Evidence-Based Practice (EBP)
First Recognized Psychosocial EBP

- ACT has over 50 published empirical studies -- at least 25 are RCTs
- Several reviews and meta-analyses of ACT research
- All indicate some degree of improved community integration for ACT individuals
What the Data Say Across Studies

- ACT’s most robust outcomes:
  - Decreased hospital use
  - More independent living & housing stability
  - Retention in treatment
  - Individual and family satisfaction

- Variable evidence:
  - Employment
  - Substance use
  - Quality of life
  - Psychiatric symptoms
  - Criminal justice involvement
Why So Much Variability?

- Secondary areas not targeted in services.
  - e.g., focus was on decreasing hospitalization, not improving employment outcomes

- No indexing of program fidelity
PROGRAM FIDELITY

What is it & why does it matter?
Program Fidelity

Definition: The degree to which a program includes features that are critical to achieving the intended outcomes (and excludes those that are detrimental to intended outcomes).

Typical purposes of fidelity measures:
• Ensure optimal implementation & guide quality improvement
• Refine knowledge development via research
Value of Program Fidelity

• Program fidelity is positively correlated with outcomes
  • More cost-effective (Latimer, 1999)
  • Decreases hospital days (McHugo et al., 1999)
    • Outcomes come too slowly to use exclusively as feedback

• Provides empirical reference and conceptual base for informed adaptation and innovation
higher fidelity predicts better outcomes: findings from mchugo et al. (1999)

<table>
<thead>
<tr>
<th></th>
<th>high fidelity act teams</th>
<th>low fidelity act teams</th>
</tr>
</thead>
<tbody>
<tr>
<td>treatment dropouts</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>substance use in remission</td>
<td>58%</td>
<td>13%</td>
</tr>
<tr>
<td>hospital admissions</td>
<td>2.87</td>
<td>4.69</td>
</tr>
</tbody>
</table>
ACT Fidelity Measures

- Dartmouth ACT Scale (DACTS; Teague, et al., 1998)
  - Most widely used up to date
  - Focus on more structural features of ACT

- Tool for Measurement of ACT (TMACT; Monroe-DeVita, Moser, & Teague, 2012)
  - Uses same 5-point behavioral anchors as DACTS
  - Replacing DACTS in many States
  - More comprehensive evaluation tool
Dartmouth ACT Scale (DACTS)
(Teague, et al., 1998)

• Had been the most widely used ACT fidelity measure
• 28 items/ 5-point anchored scales
  ▫ (1 = not implemented; 5 = fully implemented)
• 3 subscales
  ◦ Human Resources
  ◦ Organizational Boundaries
  ◦ Services
• Incorporated into SAMHSA EBP (Toolkit) Project
• Sometimes used for accreditation/funding
Example of DACTS Item: O4. Responsibility for Crisis Services

<table>
<thead>
<tr>
<th>Domain</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Responsibility for Crisis Services</td>
<td>Not responsible for handling crises after hours</td>
</tr>
</tbody>
</table>
DACTS Concerns

- Not fully consistent with National PACT Standards
- Little grounding in program theory
- Primary focus on structure (vs. process)
- Specific measurement gaps:
  - Assessment & treatment planning
  - Team & staff functioning
  - Recovery orientation
  - Treatment & rehabilitation interventions
  - Item calibration
From DACTS to TMACT
(Monroe-DeVita, Moser, & Teague, 2012)

DACTS = 28 items
- Revised (22 items)
  - Rescaled anchors
  - Modified assessment
- Removed (6)
  - Items not particular to ACT
  - Folded into another
- Added (25)
  - New items judged critical to ACT
  - Extracted/expanded concepts embedded in earlier items

Tool for Measurement of ACT (TMACT) = 47 items
TMACT Evaluation Process:

- Two fidelity reviewers
- 1 ¾ day onsite visit
- Some data collected ahead of visit
- During the onsite visit:
  - Interview most/all team members
  - Interview small group of service recipients
  - Chart review (20% min random selection)
  - Observe team processed (daily team meeting; person-centered planning meeting)
- Rating the team
  - Independently rate
  - Consensus meeting
  - Report development
- Feedback
  - Onsite during debrief meeting
  - Report (30 pages)
  - Follow-up call (kick off strategic planning)
TMACT: A Snapshot

- 47 items that assess 120+ elements
- Look at the structural features of the team (staffing, boundaries of care, target population, level of care, types of service provided)
- Evaluate the quality of care
  - Are staff able to operate within their areas of specialty?
  - Are staff knowledgeable and skilled in psychosocial evidence-based practices?
  - Is treatment person-centered and promoting individual’s self-determination and independence?
TMACT Subscales

• Six subscales:
  1. Operations & Structure (OS): 12 items
  2. Core Team (CT): 7 items
  3. Specialist Team (ST): 8 items
  4. Core Practices (CP): 8 items
  5. Evidence-Based Practices (EP): 8 items
  6. Person-Centered Planning & Practices (PP): 4 items
CP6. Responsibility for Crisis Services: The team has 24-hour responsibility for directly responding to psychiatric crises. Team is evaluated on whether they meet the following criteria: 1) The team is available to individuals in crisis 24 hours a day, 7 days a week; 2) The team is the first-line crisis evaluator and responder (if another crisis responder screens calls, there is very minimal triaging); 3) The team accesses practical, individualized crisis plans to help them address crises for each individual; and 4) The team is able and willing to respond to crises in person, when needed.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team has no responsibility for directly handling crises after-hours.</td>
<td>Team meets up to 2 criteria at least PARTIALLY.</td>
<td>Team meets Criterion #1 and PARTIALLY meets 2 to 3 criteria.</td>
<td>Team meets 3 criteria FULLY and 1 PARTIALLY.</td>
<td>Team FULLY meets all 4 criteria (see under definition).</td>
</tr>
</tbody>
</table>
Evidence in Support of TMACT

- TMACT sets a higher bar for ACT program performance than DACTS
  - More challenging to rate over a 4.0 on TMACT than DACTS
  - Greater “specificity” -- reduces the probability of “false positives”
- TMACT more sensitive to change over time
  - Improved implementation and performance improvement is detected by changing TMACT ratings
- Variations across subscales match expectations of challenges in implementing ACT components
  - Basic and structural features are easier to accomplish, implementing evidence-based psychosocial practices more difficult
- Cross-state scores are consistent with differences in policy, training, and resource environments
  - WA has received the most upfront support
- Relationship between TMACT and Recovery-orientation
WA TMACT Scale Scores: Baseline – 18 mo
(Thin Bars = range, lowest to highest)
TMACT Overall Medians & Ranges by State (N=34 teams, 5 states)
Longitudinal Study (WA, N=10 teams, 18 mo; Cuddeback et al., 2013)

- Higher TMACT scores were associated with
  - Fewer state hospital days per month
    - Not significant for highest users
  - Fewer local hospital days for high users
  - Fewer crisis stabilization unit days

- Note:
  - WA teams generally had high fidelity and little variability, so findings are conservative estimates
AVAILABILITY OF ACT

How many ACT teams are there?
How many do we need?
Prevalence of ACT

- ACT available in at least 42 U.S. states
  - Wide variability in oversight and funding
  - Number of teams may range from 1 - 12 (e.g., NE, WA) to 75+ (MI, NY)
  - Wide variability in fidelity to the model
- Other countries have implemented ACT, or a modified version:
  - E.g., Canada; Japan; UK; Norway; Netherlands; Spain
How many ACT Teams Do We Need?

- Speculate that about 20% of the population with severe mental illness truly needs ACT.
- Research shows that ACT is only cost-effective when serving the most in need.
- Many people may appear to “need” ACT when in fact they simply need some decent quality and consistent services!

How many do you think NC has?
BARRIERS TO IMPLEMENTING HIGH-FIDELITY ACT

Findings from the National Implementing Evidence-Based Practices Project (Drake et al., 2000)
State Mental Health Authority’s Support Key Facilitator

• Funding
  • Start-up money
  • Medicaid reimbursement

• Licensing for ACT
  • Standards reflected moderate to high fidelity
  • Auditing process and accountability
  • Money contingent on meeting standards

• Technical assistance
  • Guided use of “toolkits”
  • Team assigned a consultant
  • Fidelity reviews and feedback
Barriers to High Fidelity ACT Implementation

- Ineffective agency admin and team leadership
  - Understanding of ACT
  - Allocation of resources
  - Personnel management
- Staffing
  - Competency
  - Team conflict
  - High turnover
- Lack of agency change culture
  - Only willing to make incremental changes
  - Embraced practices contrary to ACT model
  - Resistance to other EBPs
RAISING THE BAR
Implementing High-Fidelity ACT in NC
NC SMHA Support as a Key Facilitator

• **Funding**
  - NC has had Medicaid Funding for ACT as an Enhanced Service
  - Monthly case rate chunked out into 4 units
    - Billing tied to face-to-face contacts
    - Case rate (approx $1200 per person per month) comparable to other states focused on ACT implementation
  - Recent revisions in ACT Service Def focus on a per diem rate for ACT
NC SMHA Support as a Key Facilitator

- **Licensing for ACT**
  - Revised Service Definition more clearly aligned with standards of practice, reflecting moderate to high fidelity practice
  - Service Definition lists certification standards
  - Monitoring conducted by ACT TA Center and DMHDDSAS partnership via fidelity evaluations
    - MCOs still expected to operate as an “auditor” on their own
  - MCOs directed to only contract with teams meeting minimal threshold of fidelity
NC SMHA Support as a Key Facilitator

**Technical assistance**
- NC TA Center at UNC Center for Excellence in Community MH
  - Fidelity Evaluations using the TMACT
    - Direct and manage fidelity reviews, first seen as quality improvement
    - Several levels of feedback
  - High-Fidelity ACT 101 Trainings
  - NC ACT Coalition
  - Collaboration with other key Stakeholders, esp. MCOs
- DMHDDSAS Best Practices Team
  - Service Def Webinars
  - Developing ACT Training quality eval tool for state endorsement

*Not yet put in place:*
- Resources for assigned consultants/coaches
  - Plans to make best use of distance technologies
- Training needs assessment and develop/implement resources to meet those needs
Roll-Out of ACT Fidelity Evaluations in NC: Phase 1

- Phone DACTS as Initial Screen
  - All Endorsed ACT Teams (some exceptions)
  - Ratings only used to determine # of teams who approximately meet fidelity standards for DOJ reporting (4.0+ Total DACTS)
    - Increased measurement error
    - Small teams rate higher than large teams as a result of how our ACT Service Definition cross-walks with DACTS’ requirements
  - Of the 86 teams screened, 18 did not meet the minimal threshold of 4.0
    - Several teams unable to be screened because of extremely low census
ACT Milestones (Per DOJ Settlement)

• The State will be responsible to provide high-fidelity Assertive Community Treatment (ACT) as part of the community-based mental health service continuum.

• **Goal #1**: “By July 1, 2013, the State will increase the number of individuals served by ACT teams to 33 teams serving 3,225 individuals at any one time.”
  - Met: At least 50 teams meeting basic fidelity (4.0 on DACTS screen) serving 3,575 individuals

• **Goal #2**: “By July 1, 2014, the State will increase the number of individuals served by ACT teams to 34 teams serving 3,467 individuals at any one time, using the TMACT model”
  - By July 2019, 50 teams meeting fidelity, serving 5,000 individuals
Roll-Out of ACT Fidelity Evaluations in NC: Phase 2

- TM ACT Evaluations
- Training of Evaluators commenced in June, 2013
- Baseline evaluations began August, 2013
- Slow ramp up period
  - 14 teams assessed by end of 2013
  - Goal is to evaluate 5 teams per month
  - Approx 18 months for baseline evals to be completed
- MCOs only receive TM ACT rating of those teams rating 3.0+, full report of those under a 3.0.

<table>
<thead>
<tr>
<th>TMACT Rating</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No Certification</td>
<td>Below 3.0</td>
</tr>
<tr>
<td>Basic Fidelity</td>
<td>3.0 – 3.6</td>
</tr>
<tr>
<td>Moderately High Fidelity</td>
<td>3.7 – 4.2</td>
</tr>
<tr>
<td>High Fidelity</td>
<td>4.3+</td>
</tr>
</tbody>
</table>
TMACCT Evaluators: Who has been serving in this role?

1. Government authorities
   - New York, Pennsylvania
2. Training and technical assistance centers
   - Indiana
3. Partnership between #1 and #2
   - Washington, Maryland
4. ACT Program Leadership (Peer Evaluators)
   - Florida, Minnesota (Ramsey Co.)
5. Partnership between #1, #2, and #4
   - North Carolina!!
Partnership Between DMHDDSAS and Provider-Peer Evaluators

• Division’s Best Practice Team/ACT TA Center
  • Assumes Lead Evaluator Role
    • Part of job description (i.e., protected time to carry out pre- and post-evaluation work)
    • Has authority – can ensure accountability of process

• ACT Provider Role
  • Assumes Second Evaluator Role
    • Helps with data collection, some interviewing, and coming to consensus ratings
    • Reviews and provides input to report, particularly with QI feedback
TMACT in NC: How’s it Going?

- Most teams rate as predicted (around mid-3.0s)
- Have one team rating over a 4.0 at this time
- A few under 3.0
- Strong group of TMACT evaluators
  - Agency support
  - Personal investment
  - Return investment to agency
- Goal is to develop/identify shadow teams throughout the state
- TMACT implementation hiccups – timely feedback
- Ongoing need to have conversations with all stakeholders to keep everyone on the same page in support of best practice ACT
- Plans underway for ACT specific, standardized outcome monitoring
- ACT will only get stronger as we improve the continuum of care in NC
  - Need to improve step-down/alternatives to ACT
References


References (continued)


Links

- Transitions to Community Living
- NC ACT TA Center

Other resources:
- NAMI [http://www.nami.org/Template.cfm?Section=ACT-TA_Center](http://www.nami.org/Template.cfm?Section=ACT-TA_Center)
- ACT Center of Indiana [http://www.psych.iupui.edu/ACT/](http://www.psych.iupui.edu/ACT/)
- Ohio ACT Center [http://www.ohioactcenter.org/whatisact.html](http://www.ohioactcenter.org/whatisact.html)