Implementing High-Quality Evidence-Based Practice (ACT) Through Collaborative Quality Measurement and Improvement

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Premises

- Knowledge about treatment practices emerges continuously over time
  - Pre-service training is insufficient
  - In-service learning is crucial
  - Professionals work in varying degrees of isolation
- Implementation needs to be an ongoing process
- Resources are scarce
  - EBPs optimize outcomes and investment
  - Need to monitor implementation quality continuously to reevaluate models, treatment options
- Change in living systems is largely endogenous
  - Cf. self-help, recovery, complex adaptive systems

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Abstract$_1$

- Topic
  - An ongoing, statewide, inter-agency, peer-based quality improvement model
- Setting
  - Specialized program for persons with serious mental disorders & high psychiatric disability
  - Multiple sites in state behavioral healthcare system
- Methods
  - Train-the-trainer dissemination of expertise
  - Peer (provider) ratings & consultation re: fidelity
  - Ongoing common outcome & service data
  - Analysis of fidelity, administrative outcome, & web-based consumer survey data

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Abstract$_2$

- Anticipated practice quality results
  - Ongoing system-wide expertise in fidelity assessment & peer consultation
  - Establishment & continuation of a quality-improvement network among providers
  - Maintenance of fidelity to an evidence-based practice (EBP)
- Anticipated research results
  - Empirical verification of critical model ingredients
  - Pilot evaluation of quality improvement approach for limited-resource settings

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Topics

- ACT and fidelity measurement
  - Overview & rationale
  - Critical factors
- The Tool for Measurement of ACT
  - Subscales & items
  - Preliminary data & plans
- ACT & fidelity/outcome measurement in Florida
  - FACT program
  - Fidelity training & QI strategy

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ACT: Overview

- An evidence-based practice (EBP) for adults with severe and persistent mental illness
- A team-based approach to providing community-based
  - Treatment ◦ Rehabilitation ◦ Support
- Focus is on working collaboratively with consumers to address their full range of needs, for example:
  - ✓ Obtaining housing
  - ✓ Improving social skills
  - ✓ Securing benefits
  - ✓ Working with families
  - ✓ Managing symptoms
  - ✓ Gaining employment

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ACT: Components

1. Specific admission criteria: adults with SPMI
2. Transdisciplinary team *
3. Team approach/shared caseload
4. Primary provider of services
5. Comprehensive – a platform for other EBPs *
6. Intensive services
7. Services provided in-vivo
8. Assertiveness & flexibility
9. Open-ended service
10. Person-centered /recovery-oriented /individualized *
11. Engagement with natural supports

Adapted from Morse & McKasson, 2005 * recently enhanced

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ACT Research Findings Across Studies

- ACT's most robust outcomes:
  - ✓ Decreased hospital use
  - ✓ More independent living & housing stability
  - ✓ Retention in treatment
  - ✓ Consumer and family satisfaction
- Variable evidence:
  - Increases employment
  - Decreases substance use
  - Enhances quality of life
  - Improves psychiatric symptoms
  - Decreases criminal justice involvement

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Sources of Variation in ACT Outcomes

- Variation in service settings and populations
- Clinical and rehabilitative practices not consistently targeted to specific outcome areas (as in EBPs)
- Indexing of program fidelity inadequate or lacking, especially in many earlier studies

(McHugo et al., 1998)

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Evidence-Based Practices
For persons with severe mental illnesses

- Per SAMHSA/CMHS
  - Assertive Community Treatment (ACT)
  - Integrated Dual Disorders Treatment (IDDT)
  - Supported Employment (SE)
  - Illness Management and Recovery (IMR)
  - Family Psychoeducation & Support
- Others
  - Psychopharmacological treatment
  - Empirically supported psychotherapies
  - Supported housing
  - Peer-provided services & supports

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Fidelity (In Brief)

- Definition: The degree to which a program includes features that are critical to achieving the intended outcomes & excludes detrimental features
- Fundamental purposes of fidelity measures
  - Ensure optimal implementation; guide quality improvement
  - Refine knowledge development
- Fidelity positively correlated with outcomes: ACT
  - More cost-effective (Latimer, 1999)
  - Decreases hospital days (McHugo et al., 1999)
- Provides empirical reference and conceptual base for informed adaptation and innovation

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Need For a New ACT Fidelity Measure

- Early form of the Dartmouth ACT Scale (DACTS – Teague et al., 1998) was developed as study-specific research component
  - Revised, extended to other ACT studies as DACTS
- Use became widespread
  - Effective tool for differentiating ACT from other models
  - Format useful for training
- Limited attention to omissions/limitations
  - Distinction between fidelity measure and program specifications not always appreciated
  - Implications for practice and research

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Potential Threats to Practice & Research
From Gaps in Fidelity Specifications

- Providers use fidelity measure as guide, overlook omitted program features
- Selective regulatory & fiscal incentives weaken program integrity
- Programs become less effective
- Incomplete coverage leaves critical ingredients unobserved
- Omission of critical features reduces capacity to differentiate better and worse programs
- Weaker program theory, compromised specifications for EBP, weaker evidence

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Theoretical Framework for ACT Fidelity Measurement:
Underlying Factors

- Recovery orientation
  - Consumers' goals / motivational strategies / alliance
  - Focus on satisfying, independent life in community
  - Movement toward eventual graduation embraced
- Flexible, individualized application of resources
  - Intensity, timing, targeted high-quality (EB) practices
  - Adapted to momentary need in long-term context
  - Delivered in consumers' communities
- Provider team & teamwork
  - Multidisciplinary team providing targeted services
  - Collaboration – trans-disciplinary, integrated approach

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The Tool for Measurement of ACT (TMACT)

Subscales & Items

Developed initially in Washington State with support from the WA Mental Health Division

TMACT Structure

- 47 items; 5-point anchored scales
- 6 subscales:
  - Operations & Structure (OS, 12 items)
  - Core Team (CT, 7 items)
  - Specialist Team (ST, 8 items)
  - Core Practices (CP, 8 items)
  - Evidence-Based Practices (EP, 8 items)
  - Person-Centered Planning & Practices (PP, 4 items)
- Detailed protocol

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Operations & Structure (OS)

OS1. Low Ratio of Consumers to Staff
OS2. Team Approach
OS3. Daily Team Meeting (Frequency & Attendance)
OS4. Daily Team Meeting (Quality)
OS5. Program Size
OS6. Priority Service Population
OS7. Active Recruitment
OS8. Gradual Admission Rate
OS9. Graduation
OS10. Retention Rate
OS11. Coordination of Hospitalization
OS12. Dedicated Office-Based Program Assistance

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Core Team (CT)

CT1. Team Leader on Team
CT2. Team Leader is Practicing Clinician
CT3. Psychiatric Care Provider on Team
CT4. Role of Psychiatric Provider (In Treatment)
CT5. Role of Psychiatric Provider (Within Team)
CT6. Nurses on Team
CT7. Role of Nurses

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Specialist Team (ST)

ST1. Substance Abuse Specialist on Team
ST2. Role of SA Specialist (In Tx)
ST3. Role of SA Specialist (Within Team)
ST4. Vocational Specialist on Team
ST5. Role of Voc Specialist (In Employment Services)
ST6. Role of Voc Specialist (Within Team)
ST7. Peer Specialist on Team
ST8. Role of Peer Specialist

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Core Practices (CP)

CP1. Community-Based Services
CP2. Assertive Engagement Mechanisms
CP3. Intensity of Service
CP4. Frequency of Contact
CP5. Frequency of Contact with Natural Supports
CP6. Responsibility for Crisis Services
CP7. Full Responsibility for Psychiatric Services
CP8. Full Responsibility for Rehab Services

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Evidence-Based Practices (EP)

EP1. Full Responsibility for DD Services
EP2. Full Responsibility for Vocational Services
EP3. Full Responsibility for Wellness Management
EP4. Integrated Dual Disorders Treatment Model
EP5. Supported Employment Model
EP6. Engagement & Psychoeducation with Natural Supports
EP7. Empirically-Supported Psychotherapy
EP8. Supportive Housing Model

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Person-Centered Planning & Practices (PP)

PP1. Strengths Inform Treatment Plan
PP2. Person-Centered Planning
PP3. Interventions Target a Broad Range of Life Goals
PP4. Consumer Self-Determination & Independence

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TMACT Fidelity Review Methods

- Review in pairs: independent ratings; consensus
- Currently takes 1.5 days per fidelity review
- Primary data sources:
  - Team survey & Excel spreadsheet (before review)
  - Observation of team & treatment planning meetings
  - Chart review (random selection of 10)
  - Interviews with most staff and 3-5 consumers
- Feedback: meeting with the team & written report
  - Focus is on performance improvement
  - Recommendations at micro & macro levels
- Variations in fidelity assessment staffing
  - External (out-of-state) evaluators
  - Peer providers (via train-the-trainers – FL)

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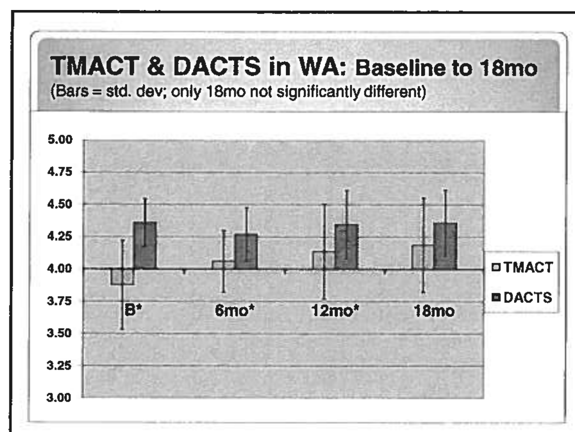

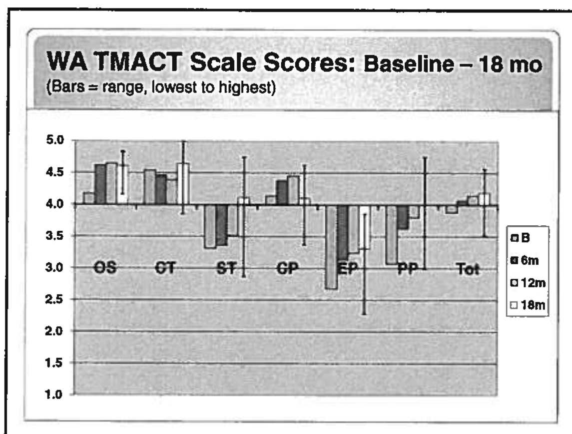

Pilot Conclusions (WA & Elsewhere)

- TMACT sets a higher bar for ACT program performance than earlier measure
- TMACT more sensitive to change than DACTS
- Variations across subscales match expectations of challenges in implementing ACT components
- Cross-state scores are consistent with differences in policy, training, and resource environments
- Overall measure and selected subscales correlate significantly with recovery orientation
- Measure is feasible and valuable in current form, but strategies for efficiency can be helpful

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Next Steps for TMACT

- Finalize instrument
- Continue current use; extend to other states & countries
- Prepare/refine training materials & protocol
- Develop research (with additional support)
  - Fidelity measurement: reliability/validity; value added
  - Multi-setting evaluation of fidelity vs. outcomes
- Continue to address enduring questions
  - ACT: benefit/cost; absorption of new technology
  - Fidelity: models; methods, intensity, timing

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The Florida Assertive Community Treatment Program:

Evaluation, Fidelity Training, & Quality Improvement

"FACT"

A Program of the Florida Department of Children & Families (DCF)

The Florida ACT Program (FACT)

- Ten-year history
- 31 teams statewide, 100 consumers per team
- Annual funding: up to $1.25M per team
  - Substantial Medicaid funding
  - Supplemental state funds for housing, medication
- Training & consultation provided at startup
  - Resources for training, quality monitoring & improvement are extremely limited
- Common service/outcome data

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Florida ACT Evaluation:

Purposes

- Establish statewide organizational capacity to document, track, and improve fidelity & outcomes
- Develop an ongoing quality-improvement network to maintain an effective peer-evaluation capability
  ... through collaboration among providers
  ... in partnership with state MH agency (DCF)
- Link data on program processes with concurrent and archival data on outcomes, identify critical elements

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Florida ACT Evaluation:
Data & Research

- Outcome data
  - Medicaid and other publicly funded behavioral healthcare enrollment, assessments, and services
  - Employment, education, arrests
  - Consumer ratings of programs' recovery orientation via web-based survey
- Research questions
  - Overall fidelity; variation by site, program ingredients
  - Outcome relative to non-ACT comparison group
  - Relationships among consumer characteristics, fidelity and outcome; critical ingredients

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ACT Fidelity Evaluation:
Train-the-Trainers Model

- Outside expert trains selected FL staff
  - To conduct fidelity reviews & prepare feedback
  - To train other staff to do same
  - Result: 2 expert trainer pairs + alternate
- Two FL trainer/evaluator pairs each train 2 other fidelity evaluation pairs
  - Net expert raters: 12
- Training during early assessments, assessments then conducted independently; all teams assessed
  - Outside trainer assesses first team (1)
  - Each of 6 FL pairs assesses 5 FACT teams (30)

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Florida ACT Evaluation:
Preliminary Evaluation Findings

- Fidelity (1/3 of teams assessed) & outcomes
  - Fidelity consistent with less training & other resources
  - Reductions in hospitalization, emergencies
  - Within range for ACT teams with QI needs
- Feasibility & acceptability
  - Teams & administrators value benefits of process
  - Steep learning curve impacts assessment pace
  - Peer consultation role requires new skills
- Implications
  - Efficient feedback reporting needs modular approach
  - Consider similar approach for specific EBPs
  - Need to expand use of information technology

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Conclusion

- Effective long-term implementation of EBPs requires protracted attention to fidelity
  - Fidelity monitoring should include a focus on critical processes
- The goal of high-quality service presupposes the existence of well-informed communities of practice
  - The need for quality improvement typically exceeds available resources
  - Self-help / mutual-help among providers may help to fill the gap
  - Improvements in knowledge dissemination technology & practice are needed

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