Giving Voice to Children and Families through a Measurement Feedback System (MFS)

Leonard Bickman
Emily Sheffer
Susan Douglas Kelley
Ana Regina De Andrade
Ryan Hargraves
Carolyn Breda
Manuel Riemer
Michele Athay

23rd Annual Children's Mental Health Research & Policy Conference
March 8, 2010

Disclosure
Leonard Bickman, Susan Douglas Kelley, Carolyn Breda, Manuel Riemer and Vanderbilt University have a financial interest in the CFIT System

The Problem:
A Quality Chasm Exists for Mental Health Services

The findings to date offer little support for the effectiveness of conventional clinical intervention for young people. (Weisz & Jensen, 1999, p. 133)

Some common elements of effective practice have been observed in treatment as usual but not in the depth and breadth needed for effective treatment. (Garland, Bickman, & Chorpita, 2010)

We Need Fundamental Change

“You can't cross a chasm in two small jumps.”

David Lloyd George, (1863-1945), former British Prime Minister

Little Research Support for the Effectiveness of Treatment as Usual in Community Settings and Slight Change in a Decade

Are We Systematically Learning From the Youth that We Treat?
A Relevant Model; Treatment of Childhood Cancer

• Cure rate for some childhood cancers went from 20% to 80% in 30 years
• Most enter a randomized clinical trial
• Almost every child treated adds to knowledge
• Few children treated in human services are systematically monitored to add to systematic knowledge
• Every child treated should be an opportunity to learn
• Failure is acceptable but failure to learn is not

Lack of Accurate & Systematic Feedback to Clinicians is Part of the Problem

Clinical Intuition and Regulations are not Sufficient

• Fifty years of research does not support relying only on clinical judgment for effective practices
• Reliance on other standards of putative quality such as licensing and accreditation also retard development of effective services
• This dependency contributes to the poor outcomes of treatment in community settings

What is Needed: A Concurrent, Systematic Monitoring and Formative Feedback Practice Improvement Tool

Practice Without Feedback Does Not Lead To Improvement

Strong Support for Feedback Concept

• Measurement and feedback are the core of all management and learning theories.
• Thousands of studies outside of mental health show that improvement is minimal without measuring performance and providing feedback.
• Direct feedback occupations show improvement with experience. However, clinician experience is not a good predictor of client outcomes.

“The greatest obstacle to discovery is not ignorance - it is the illusion of knowledge”

Daniel Boorstin, 1984 Librarian of Congress
Comprehensive Web Systems

Include administrative and clinical functions, e.g., fiscal, human resources, scheduling, cost reporting, assessment, medication management; typically large corporations

– Anasazi Software, Inc. (Anasazi Systems)
  – http://www.anasazisoftware.com/
– Netsmart Technologies, Inc. (Avatar Suite)
  – http://www.ntst.com/
– Duke Behavioral Health Informatics (MindLinc)
  – http://www.mindlin.com/
– Infinity/Civerex, LLC – (CIVER-PSYCH®)
– NextStep Solutions
  – http://www.nextstepsolutionsinc.com/ProductInfo.html

Measurement Feedback Systems

Usually focus on data collected concurrent with treatment, clinical usefulness, client-driven; typically developed by researchers

– OQ Measures, LLC (OQ® Analyst – Burlingame & Lambert) http://www.oqmeasures.com/site
– PracticeWise, LLC (PracticeWise – Chorpita & Daleiden) http://www.practicewise.com/web
– Mental Health Pros (Mental Health Portal) http://mentalhealthpros.com/mhp/index.php
– Vanderbilt University (CFIT – Bickman, Riemer, Kelley & Breda)

Contextualized Feedback Intervention and Training CFIT

• Is a practice improvement strategy
• is part of treatment – provides an opportunity for brief reflection at the close of a session
• is primarily designed to support clinicians
• supports supervisors – helps supervisors identify areas where clinicians need extra guidance
• can be used for administrative and reporting functions

Key Domains of CFIT

• System Development
• Measurement
• Feedback
• Training CFIT operations and in Common Factors

Overview of CFIT Process

Wireless

Remote

Office

Secure database stores processed data

Office & Remote

Common Factors & CFIT training modules

Office

Paper

My Load

Dashboard

Secure database stores processed data

Common Factors & CFIT training modules

Reports are generated on paper or Web site for use in clinical sessions, treatment planning, and supervision

Client

Common Factors

Feedback

[Today’s date]
CFIT Common Factors Training Modules

- Common factors are those features typically found in all psychotherapy approaches: Three current modules
  - Building and repairing therapeutic alliance
  - Addressing expectancies about counseling
  - Collaborative planning

- Developed collaboratively by academic and clinical experts
  - Provide useful tools for practice, reflection, and supervision
  - Fit into a busy clinical schedule by offering online convenience
  - Internal and external review for clinical utility and scientific accuracy
  - Topic matter for each module is directly linked to questionnaires included in the CFIT system

Measurement: The Peabody Treatment Progress Battery (PTPB)

- 18 measures include processes and outcomes
- Includes strength-based measures
- Brief – each scale takes 10 seconds to 2 minutes
- Reliable and show convergent and divergent validity
- Information from youth, clinician, and caregiver
- Easy to score and interpret
- Sensitive to change
- Free for anyone to use
- [http://peabody.vanderbilt.edu/ptpb](http://peabody.vanderbilt.edu/ptpb)

CFIT Consultation and Training Model

- CFIT is a tool for transforming an agency into a learning organization
- Ongoing support to
  - Promote sustainability through local ownership
  - Contextualize CFIT operations and feedback to an agency’s needs and resources
  - Apply feedback to inform clinical sessions, supervision, program planning, professional development, and more
  - Practice improvement leadership at all levels of your agency and support accountability.

The Evaluation

A six year study funded by the NIMH

Treatments I & II

Treatment I: Training Randomly Assigned by Site
- Clinical training on common factors includes
  - Web-based modules
  - In-person training
- Of 38 sites, 19 got training and 19 did not

Treatment II: Feedback Randomly Assigned by Site
- Feedback on a weekly basis
- No weekly Feedback
Data & Analysis
• 726 youths in 3,666 sessions during their first year in CFIT
• 257 clinicians
• Two analyses conducted: intent-to-treat (ITT) analysis and feedback and training adherence analysis
• Two outcomes presented – youth and clinician symptoms and functioning (SFSS) scores.

Does Feedback & Training in Common Factors Affect Clinical Outcomes? (preliminary results)

Feedback & Training Improves Youth Functioning (youth report)
• Youth functioning improves more when clinicians receive feedback and training in common factors \((p=0.0003)\) (blue line)
• Red line is all other groups (no fb/no training; fb/no training; no fb/training)

Feedback & Training Improves Youth Functioning (clinician report)
• Clinicians report youth functioning improves more when they receive feedback and training in common factors \((p=0.0080)\) (blue line)
• Red line is all other groups (no fb/no training; fb/no training; no fb/training)

Does Feedback Impact Clinician Behavior?
• We examined whether clinicians who accessed more feedback reports containing an alert subsequently addressed that topic in future sessions and if this affected clinical outcomes

Feedback affects clinician behavior
• The more FB reports read by the clinicians in which there was an alert indicating a specific problem area, the more often that topic was discussed in future sessions.
• Holds true for several youth and caregiver reported problem.

Note: from GLM models with a Poisson link function
High Feedback Adherence Improves Youth Functioning
(youth report)

- Clinicians who viewed a higher percentage of weekly feedback reports (blue line) improved faster than clients whose clinicians viewed a smaller percentage of feedback reports ($p = .01$)

What Can CFIT Do For Youths and Caregivers?

- Provide a way to raise issues they may not feel comfortable addressing aloud or in the presence of caregiver or youth
- Reassure them that the clinician is paying attention to their needs and is contextualizing services to their concerns
- Demonstrate that effective services are a priority
- **CFIT is a tool that takes the consumer's voice beyond the session and into all aspects of care**

What Can CFIT Do For Clinical Supervisors?

- Provide clinical data on each case's progress and areas that seem to be improving or declining
- Provide a tangible framework from which to guide clinical supervision that is independent of the clinician
- Provide the needed information for a continuous quality improvement effort that facilitates accountability
- **CFIT is a tool that provides the supervisor with needed resources to promote evidence-based practice**

What Can CFIT Do For an Agency?

- Serve as evidence to funding agencies that quality of services and effectiveness are a priority
- Manage clinical services based on their effectiveness as well as their price
- Provide data on the effectiveness of services, how clients are improving, the typical problems being encountered, and where needs are not being met
- **CFIT is a tool that supports overall practice improvement**
**What CFIT Can Do for a State**

- Determine who is being served and their progress
- Provide a Quality Assurance mechanism
- Incentivize optimal performance for all agencies in a non-competitive framework
- Reduce costs of regulations and other data collection activities

**Plans**

- Recreated all the software to make it more flexible and user friendly – will subject it to additional testing
- Revised and shortened the measures to use and test in new system
- Plan to test CFIT with different types of feedback with co-morbid youth
- Working with Tom Sexton on integrating CFIT with his evidence based treatment (Functional Family Therapy) to produce synergistic effect
- Hope to integrate CFIT with other EBTs