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



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

- "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

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



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

Daniel Boorstin, 1984 Librarian of Congress

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.

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.mindlinc.com/
- -Infinity/Civerex, LLC (CIVER-PSYCH®)
 - -http://www.civerex.com/pages/civpsyc.html
- -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

- Danya International, Inc. (My Outcomes PCOMS Miller & Duncan) https://www.myoutcomes.com/
- 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

Paper

Office & Remote

Office & Remote

All Paper

Office & Remote

All Paper

Office & Remote

Office & Remote

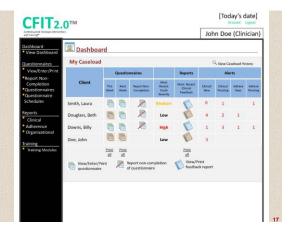
Office & Remote

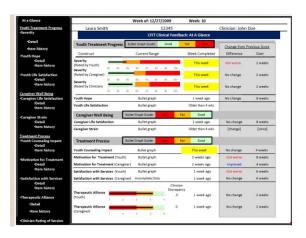
Secure database

Secure database

Reports are generated on paper or Web
site for use in clinical sessions,

CFIT training





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

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.

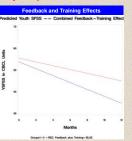
Does Feedback &
Training in Common
Factors Affect
Clinical Outcomes?

(preliminary results)

Feedback & Training Improves Youth Functioning

(youth report)

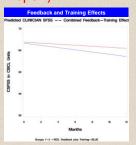
- Youth functioning improves more when clinicians receive feedback and training in common factors (p=.0003) (blue line)
- Red line is all other groups (no fb/no training; fb/no training; no fb/training)



Feedback & Training Improves Youth Functioning

(clinician report)

- Clinicians report youth functioning improves more when they receive feedback and training in common factors (p=.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.

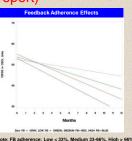
Problem Alert from Youth SFSS	Discussion Topic from SRF	p-value
Drinking alcohol	Alcohol & substance use	<0.0001
Fear of being laughed at in class	Problems with peers	<0.0001
Getting in trouble	Delinquent behavior	<0.0001
Don't get along w/family and friends	Family problems	<0.0001
Low youth alliance	Relationship with youth	<0.0001
Low caregiver motivation for youth's treatment	Caregiver motivation for the youth's treatment	<0.0001
High caregiver strain total score	Caregiver strain of parenting a youth w/ emotional/ behavioral problems	<0.0001
Low caregiver's satisfaction with life score	Caregiver satisfaction with life	<0.0001
Low caregivers alliance	Relationship with caregiver	<0.0001

Note: from GLM models with a Poisson link function

High Feedback Adherence Improves Youth Functioning

(youth report)

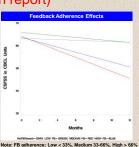
 Clinicians who viewed a higher percentage of weekly feedback reports (blue line) improved faster than clients whose clinicians' viewed a smaller percentage of feedback reports (p=.01)



High Feedback Adherence Improves Youth Functioning

(clinician report)

 Clinicians who viewed a medium to high percentage of weekly feedback reports (red and blue lines, respectively) perceived their clients to improve faster than clinicians who read a lower percentage of feedback reports (gray and green lines) (p=.0071)



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

22

What Can CFIT Do For Clinicians?

- Better identify thoughts, events, and feelings of clients and caregivers
- · Identify successes and problem areas to focus sessions
- Provide consistent and systematic feedback of clinically relevant information
- · Inform treatment planning and goal setting
- Focus sessions on clients' issues to show that you are attending to their concerns
- · Check on how well treatment is working
- CFIT is a tool that enhances the clinician's ability to tailor treatment as it progresses

32

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 <u>independent</u> 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

33

34

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