IMPROVING BEHAVIORAL HEALTH OUTCOMES: A FEASIBILITY TRIAL OF ELECTRONIC MEASUREMENT FEEDBACK AND FLEXIBLE EVIDENCE BASED TRAINING
Research Agenda

• The mismatch between EBTs and youth clients in community settings
• Evidence-guided approaches to supporting EBTs
  – Unpacking the manuals: Modular treatments
  – Monitoring and feedback systems
Phase I

Goal: Examine the feasibility and impact of training Seton providers and trainees in a modular, evidence-based treatment protocol for youth
Background

• Hundred of randomized trials of youth psychotherapy over past 40 years shown beneficial (Weisz & Gray, 2008)

• Majority of youths in need never receive evidence-based treatments (Kaysen, Lindgren, & Rao, 2014)

• Improving access to effective behavioral health treatment is prevailing public health concern (Institute of Medicine, 2007)
Mean effect sizes of youth RCTs

- Casey & Berman, 1985
- Weisz et al., 1987
- Kazdin et al., 1990
- Weisz et al., 1995
- Weisz et al., 2007
- Weisz, Donenberg, Han & Weiss, 1995

Treatment as Usual vs. no treatment, 9 studies, ES = .01
What *is* treatment as usual?

- Majority of therapists report regular use of novel, unsupported treatments (NUTS) (Pignotti & Thyer, 2009; Sharp, Herbert & Redding, 2008)
- ...but also self report use of EBTs
The dilemma facing therapists

- Majority of children and youth present with high levels of comorbidity
- Most EBTs were developed to address a single problem area
- Most caseloads span multiple primary disorders
Common Elements across EBTs

• Recent reviews have dissected treatment protocols and point to a list of “common elements” that appear across diagnostic categories

• Chorpita and Daleiden (2007; 2011) looked at ESTs for Anxiety, Depression, ADHD and Conduct and identified more than 2 dozen elements that spanned diagnostic categories
How do you derive common elements?

These are “practice elements.”
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Unpacking the single-disorder EBTs

- The Coping Cat: CBT for Anxiety
- Defiant Children: BPT for Conduct
- PASCET: CBT for Depression
- TF-CBT: Treating Trauma and Traumatic Grief in Children and Adolescents
Phase I: Flexible Protocol Training

• 5-day training in the *Modular Approach to Therapy for Children with Anxiety, Depression, Trauma and Conduct* (August 12 – 18, 2015)

• N = 19 (psychologists, psychology trainees, social workers, psychiatry residents)
Training Outcomes - EB Knowledge

$M=99.6$, $105.9$, $*p < .05$
Training Outcomes- EB Attitudes

Pre-training

Post-training

M = 153.0

M = 164.7, *p < .05
Phase II

Examine the feasibility and impact of implementing an electronic measurement feedback system within a Seton outpatient behavioral health clinic
Clinical decision-making

• The clinical picture does not remain static
  – Youth seen in community clinics are typically complex and comorbid
  – Symptoms wax and wane
    • New problems emerge
    • Some problems resolve while others worsen
• It is hard to know when to “stay the course” or “change direction”
• Typically rely on clinical judgment
Monitoring and Feedback Systems (MFS)

• Provides systematic and frequent measurement of treatment progress and process

• Provides feedback to enhance clinical decision making, improve accountability, and inform clinical effectiveness
Effects of MFS on Routine Care

• For youth: 1 large RCT (28 clinics in 10 state)  
  (Bickman, Kelley, Breda, de Andrade, & Riemer, 2011)
  – Youth in MFS (173) improved more and more quickly than youth with no MFS (N = 167)
  – Associated with the same amount of improvement relative to routine care as an evidence-based treatment
Phase II: MFS Implementation

- OwlOutcomes implemented to monitor client progress and therapist adherence to EBT
  - Therapist enrolls patient at first treatment session
  - Weekly measures completed by therapist (1), caregiver (4), and patient if appropriate for age/cognitive abilities (3)
  - Graphic data accessible to supervisor and therapist
Phase II: Enrollment to Date

• Enrollment began 2/1/2016
  – Therapists: n = 11 (n = 8 with enrolled patients)
  – Patients: n = 18
  – Early Termination Patients: n = 2
Was your child's therapy appointment today?
If no, what was the appointment date?
Did you talk with your child's therapist at all during this appointment?

We would like you to tell us about your child's therapy appointment this week. People can talk about and do a lot of different things during a therapy appointment. We don't expect that you will have done all of these things in your last appointment. In fact, you may not have done any of these things this week. In this week's appointment, how much did you do the following?

1. The therapist had a specific plan for what to go over in the appointment.
2. My child or I filled out a questionnaire or answered questions about how my child has been feeling or acting lately.
3. The therapist described anxiety, depression, trauma, or another condition, such as what it looks and feels like and how my child can get better.
4. The therapist described my child's therapy, such as how it can help and what is expected of us.
5. The therapist worked with my child or me to develop or change the goals for therapy.
6. The therapist went over therapy homework or things to work on outside of therapy.
7. The therapist helped my child or me role play or practice new skills or behaviors in the appointment.
8. The therapist praised or rewarded my child for working hard in therapy, or encouraged me to provide a reward.
9. The therapist talked about different feelings, such as what they feel like, how they look, what they are called, or how to rate them using a thermometer or number scale.
10. The therapist taught my child relaxation skills, such as breathing exercises, muscle relaxation, or imagining nice things.
11. The therapist talked about unhelpful thoughts that make my child upset and how to
This measure is to be filled out by the PARENT/CAREGIVER.

Please answer the following questions about Client10.

Please choose the answer that best describes your child.

1. Feels sad, unhappy
2. Feels hopeless
3. Is down on self
4. Worries a lot
5. Seems to be having less fun
6. Fidgety, unable to sit still
7. Daydreams too much
8. Distracted easily
9. Has trouble concentrating

Back  Save And Continue
OwlOutcomes Therapist Portal: CBT Adherence Report, Therapist

UTA-CBTAM-TR-UTA CBT Adherence Measure - Therapist Report

Progress Graph

Point Values
- CBT Adherence - Average Total Score
- CBT Adherence - General Strategies

Problem Type Behavior Problem

Reset
OwlOutcomes Therapist Portal: Target Behavior Monitoring

PBC - Parent-Problem Behavior Checklist for Parents

Progress Graph

- Very Often (many times a day)
- Often (at least once a day on average)
- Sometimes (a few times)
- Rarely (once or twice)
- None

February 25 - March 17

- Clear communication between youth and mother
- Effective problem solving between youth and mother
- Establishment of age-appropriate boundaries between youth and mother

Reset
OwlOutcomes Therapist Portal: Symptom Checklist

PSC-Y-17-Pediatric Symptom Checklist - Youth - 17 (PSC-17)
Progress Graph
OwlOutcomes Therapist Portal: Alliance Measure

TASC-R-Therapeutic Alliance Scales for Children-Revised
Progress Graph
OwlOutcomes Measures Completed to Date

Measures Completed

Weeks
OwlOutcomes Measures Completed to Date

Weeks
OwlOutcomes to Date

- Therapist: 96.7%
- Caregiver: 73.6%
- Child: 78.4%
Barriers to Implementation

• Organizational cohesion

• Setting up service agreement with OwlOutcomes

• Working with the front desk to change procedures

• Bugs within OwlOutcomes

• Two different systems: OWL and Athena
Timeline: IRB & CROR

• UT Austin IRB (Seton/UT have IRB reciprocity)
  – Phase I
    • Submitted: 07/09
    • Approved: 08/04
  – Phase II
    • Submitted: 08/06
    • Approved: 8/19

• Clinical Research Operational Review at Seton
  – Phase I
    • Submitted: 07/30
    • Approved: 08/11
  – Phase II
    • Submitted: 08/24
    • Approved: 09/23
Timeline: Services Agreement with OWL Outcomes

- 9/15: Business Contracts Office completed paperwork regarding services agreement
- 9/23: Exclusive Acquisition Justification Form approved by purchasing office
- 09/28: Information Security Office-Required penetration test/3rd party application security assessment
  - 11/21: OWL provided ISO with required information
  - Approved soon after by ISO
- 11/23: Final Approval from UT Office of Business Contracts
- 11/25: Signed Contract agreement with OWL
- 12/14: Invoice completed; Service agreement activated
Timeline: OWL Rollout

- 12/14/2015: OWL Training for psychologists
- 01/11/2016: OWL Training for interns (individually)
- 02/01/2016: OWL patient enrollment
- 03/02/2016: Follow up training for all clinicians
- 03/29/2016: TCSC front desk begins assisting in collecting measures before appointment
- 06/01/2016: Clinicians responsible for enrolling new patients
Conclusions

- Treating clients in community settings is complicated

- Modular protocols, supportive supervision, and MFS can provide some help

Future Directions

- Removing the research assistants from the MFS procedures

- Ways to improve consistency in completing measures
  - Providing feedback to clinicians

- Integrating the EMR and MFS
Future Research Questions

• What are the ideal types of measures to use?
  – Standard vs. individualized protocol of measures
  – Adherence only, symptom only, adherence and symptom

• What is the optimal way a MFS should be used?
  – Frequency at which clinicians and patients view feedback
  – Feedback delivered to clinician alone vs. clinician and client
  – Using MFS in supervision vs. no use in supervision