



# Monitoring fidelity to treatment models in longitudinal implementation research

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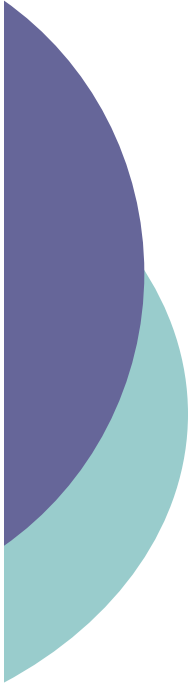
The Wharton School, University of Pennsylvania



# Objectives

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- Brief review of research on sustained implementation
- Overview of challenges to monitoring fidelity in longitudinal research
- Presentation of a case study
- Discussion of methods and alternate study designs
- Summary of Key Points



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- Are programs and interventions sustained after initial implementation?
    - As intended?
    - For how long?
    - How do we know?



# Current literature on implementation

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- Current evidence base :
  - Anecdotal
    - Most sites discontinued a QI program for depression in primary care after study was complete (Wells et al., 2008)
  - Self-report
    - Of 19 studies of healthcare programs, 12 measured sustained implementation solely by interview or survey (Schirer, 2005).
  - Observation
    - Seven of 19 studies reviewed used observation, monitoring or data surveillance (Schirer, 2005).
    - Eight of 34 studies reviewed monitored sustained implementation (Durlack, 2008)



# Methods of monitoring implementation

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- Program indicators: Are minimum requirements in place?
- Chart review/data surveillance: Does program data indicate implementation? (e.g., Randall & Biggs, 2008)
- Self-report: Do staff and administrators believe they are implementing the program/intervention? (Scheirer, 2005; Martin et al., 1998)
- Structured self-reported fidelity: Do the clinicians endorse the use of particular elements of the intervention? (e.g., Henggeler et al., 2008).
- Observation: Can an external observer recognize or differentiate the program or intervention? Is it delivered competently and with integrity? (e.g., Baer et al., 2003)
- Client/Patient/Caregiver report: Do clients report or demonstrate that they receive key elements of the program or intervention? (e.g., Schoenwald et al., 2008)



# Descriptions of implementation

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- Months sustained (e.g., Glisson, 2008)
- Dichotomous (e.g., Scheirer, 1990; Glaser et al., 1980)
- Full vs. Partial vs. Discontinued (e.g., Martin et al., 1998)
- Adherence/Fidelity measures (e.g., Henggeler et al., 2008)
- % of Components Implemented (e.g., Paine-Andrews, 2000)



## How much do we know now?

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- Most prevention studies report 60% *initial* implementation; very few approach 80% (Durlak & DuPre, 2008)
- Very few prevention studies have examined long-term implementation (Durlak & DuPre, 2008)
- Review suggests self-reported program-level sustainability may be as high as 60%; but studies that report on observations report much lower rates (Scheirer, 2005).



## Sustained Implementation Rates: Mental Health/Preventive Interventions:

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- Assessed by self-report:
  - 58% of therapists used CM 6 months after a training workshop (Henggeler et al., 2008)
  - 68% of agencies trained in guided self-change were using it at 12 months post-training (85% used components) (Martin et al., 1998).
- Assessed by multiple stakeholder reports and program indicators:
  - Components of an IMHP sustained at rates from 6-92% over 3 years (Randall & Biggs, 2008)



# Sustained Implementation Rates: Health Promotion

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- Assessed by self-report/interviews:
  - 5/7 programs sustained a multidisciplinary education model over 2 years (Harris et al., 2003)
  - 60% of 78 heart health programs sustained at 3 years (Brachet et al., 1994)
  - 80% of LIFP programs sustained at 2 years (Stevens & Peikes 2006)
  - 43.6% of 189 heart health programs “very permanent, 34.8% “somewhat” after 2 years (O’Loughlin et al., 1998)
- Assessed by observation and self-report:
  - STEP UP program sustained in 37 practices at 1 year follow up (Stange et al., 2003)



# Case study: How can we monitor fidelity to a psychotherapy over time?

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- Beck Initiative
  - Partnership between Penn and Philadelphia DBH
  - Community-based therapists receive 6 months of training in CBT
  - Standards for certification are provided
  - Certification lasts two years
- Naturalistic study design: Pre- & post-training, every 3 months over 2 years....
  - Self reports on attitudes/use of CBT, org measures
  - Standardized Patient (SP) Sessions
  - Recording of actual therapy session (optional)
  - Therapists paid \$50 for each survey packet + SP session



## Case Study: Rate of Participation

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- About 50% of eligible therapists enroll in the study (varies by agency; 25-90%)
- Post-training: 93%
- 3 month: 25% completed on time; 20% late; 15% pending (phone tag, etc)
- 12 Month: One of eight therapists at the 12 month point remains employed at the agency



# Challenges

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- Attrition: 24% left the agencies
- Busy
  - 36% not returning calls
  - 20% difficulty scheduling
  - "Haven't had time to complete surveys"
- Reluctant to involve clients  
(confidentiality concerns, etc.)
- Client no-shows
- OHR and email



# Steps Taken

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- Research Assistants and Volunteers  
Katherine, Ana, & Greg
  - Regular, polite reminders
  - Very flexible scheduling
  - Willing to sit in agency waiting room all day
- Tying payment to completion of BOTH SP and surveys
- Clients reimbursed for their time
- Therapists have discretion, flexibility re: which clients participate
- Therapists can bill for time spent in SP session, etc.



# Potential Assets

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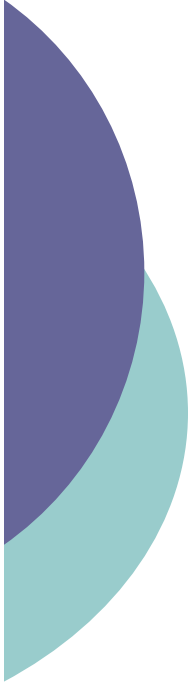
- Brief client questionnaire collected by CBH
- Recording required for re-certification after 2 years
- Therapists consent to allow competence scores done in training program to be used for research (pre, during, post, and 2 years)
- CBH credentialing may require self-audits with therapist checklists and chart reviews
- Biweekly reports of attendance and discussion at post-training internal consultation meetings faxed to CBH



## Discussion

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- Alternative Study Designs or Methods?
- Means of increasing participation and follow-up rates
- Methods of monitoring fidelity in future psychotherapy implementation research



# Summary: John Kimberly

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## Thanks to

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