Effectiveness of Motivational Interviewing (MI) for Persons with Co-Occurring Substance Use and Mental Health Disorders (COD) in Community Mental Health Clinics*

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Cheryl L. Madeja
and Eugene P. Schoener
Departments of Psychiatry & Pharmacology
Wayne State University
Detroit, Michigan, USA

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Introduction

- Co-occurring mental health and substance use disorders are etiologically and clinically complex.
- Integrated Tx approaches may be most effective.
- Recent studies have found Motivational Interviewing (MI) promising for patient with COD.
- It has been noted that MI tools are most useful in resolving ambivalence about a variety of problem behaviors and engaging people in treatment.
- Taken together, these reports indicate that integrated MI can improve general functioning and increase abstinence of COD patients.
- Thus, we undertook this *effectiveness* study.

Problem

People with co-occurring mental health and substance use disorders (COD) manifest:

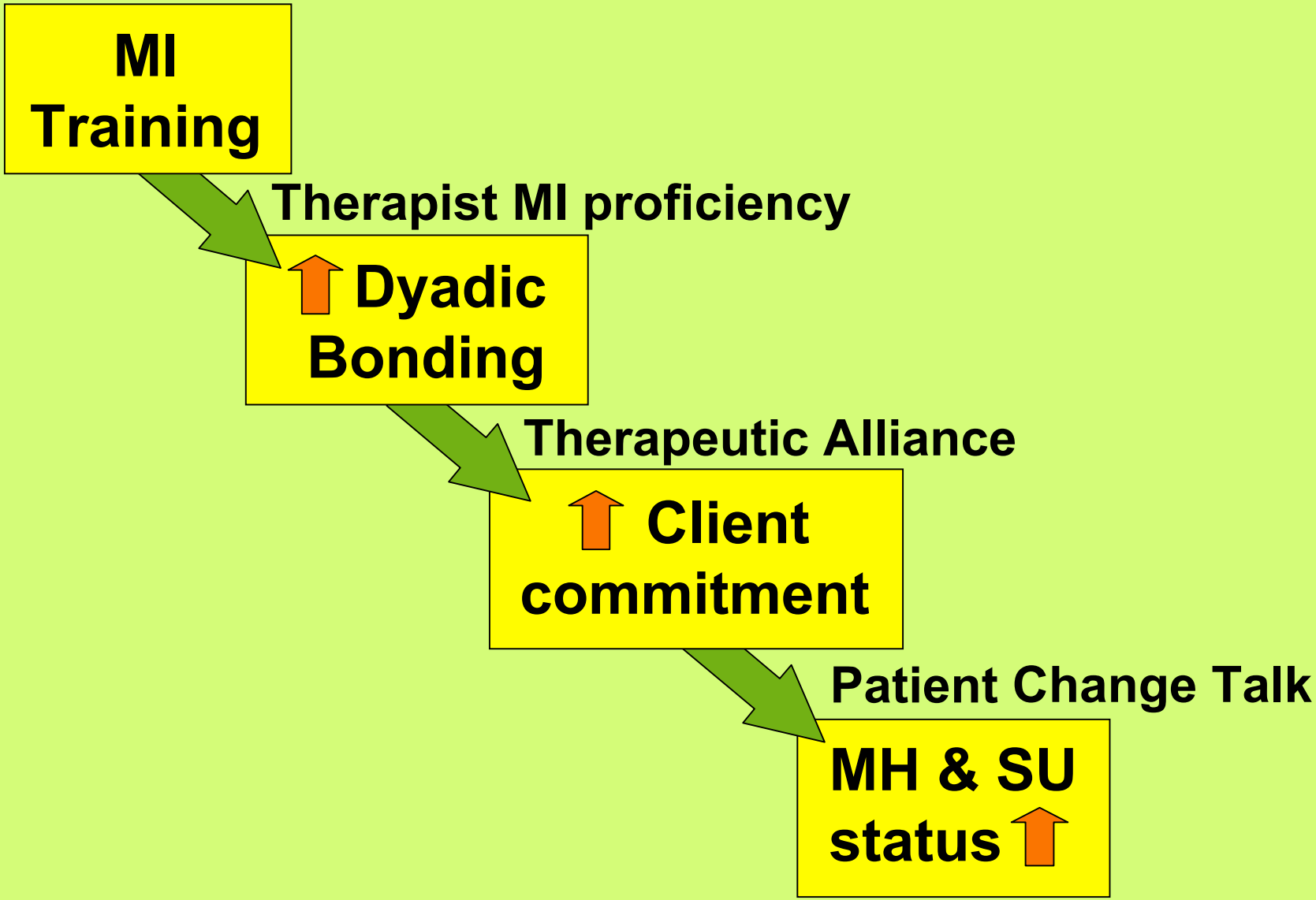
- ⇨ **more severe psychiatric morbidity,**
- ⇨ **greater treatment resistance,**
- ⇨ **poorer compliance & psycho-social adjustment, &**
- ⇨ **greater utilization of social and health care services**

compared to those with mental illness alone.

Motivational Interviewing (MI) can facilitate treatment engagement and retention of persons with SUD.

Can MI be employed and will it improve the clinical status of patients with COD in CMH settings?

Hypotheses


MI Training
Therapist MI proficiency
Dyadic Bonding
Therapeutic Alliance
Client commitment
Patient Change Talk
MH & SU status

Methods

- 10 therapists and 18 patients from 2 CMH clinics completed all study requirements.
- Therapists: 7 were female; 8 White and 2 Black; 7 MSWs, 1 BSW, 1 MSN & 1 PhD; with 1-34 years experience (mean = 15.4).
- Patients: 70% were female, 60% Black, 35% White, 6% Hispanic;
- Patients manifested 2 or more Axis I diagnoses: 58% MMD & 41% Psychosis.
- Substances used by patients: alcohol (88%), cocaine (47%), opiates (18%), cannabis (18%).

Methods-II

- Assessment battery after each treatment session during pre & post MI training periods included:
  1) Working Alliance Inventory,
  2) Readiness To Change Med Adherence & Sub Abuse
  3) Substance Use Questions, and
  4) Brief Symptom Inventory.
- All sessions were audio-taped; random sample of pre & post training treatment tapes sent for MISC analysis.
- MI training provided in a two-day workshop with didactic and skill-building components and biweekly supervision for 16 weeks. Therapists only used MI thereafter.

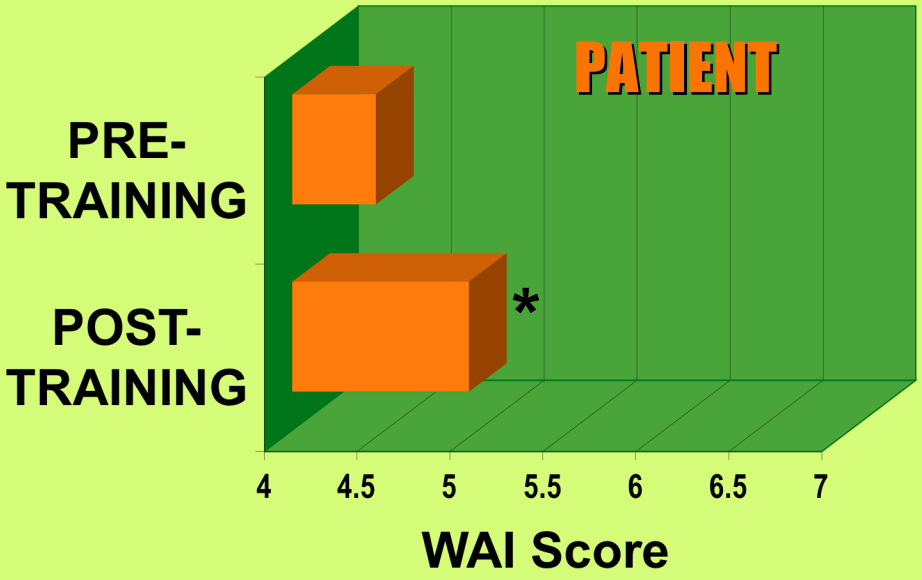
Data Analysis

- 3-level Hierarchical Linear Modeling assessed the impact of the *Intervention* (MI training/implementation) on *Patient* outcomes. Adding to this *Intervention* term, we modeled the changes across *Time* and the interaction of *Time* X *Intervention*.
- Level-1 model: changes across *Time* for the *Individual Patients*.
- In the L-2 model, L-1 coefficients varied across *Patients* (dyads)

  Means & differences for 7 key MI fidelity measures, pre and post-training periods served as covariates in the L-2 model.
- In the L-3 model, L-2 coefficients varied across *Clinicians*.

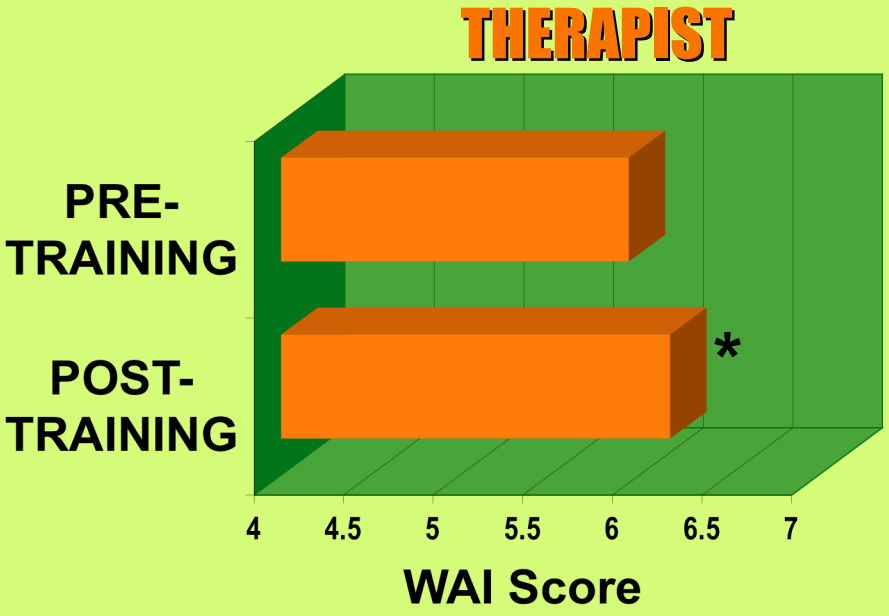
  Putative therapist level predictors included *Years in Practice* and *Years at Current Agency*. Variables retained if signif at $p \leq 0.10$.

MI and Therapeutic Alliance

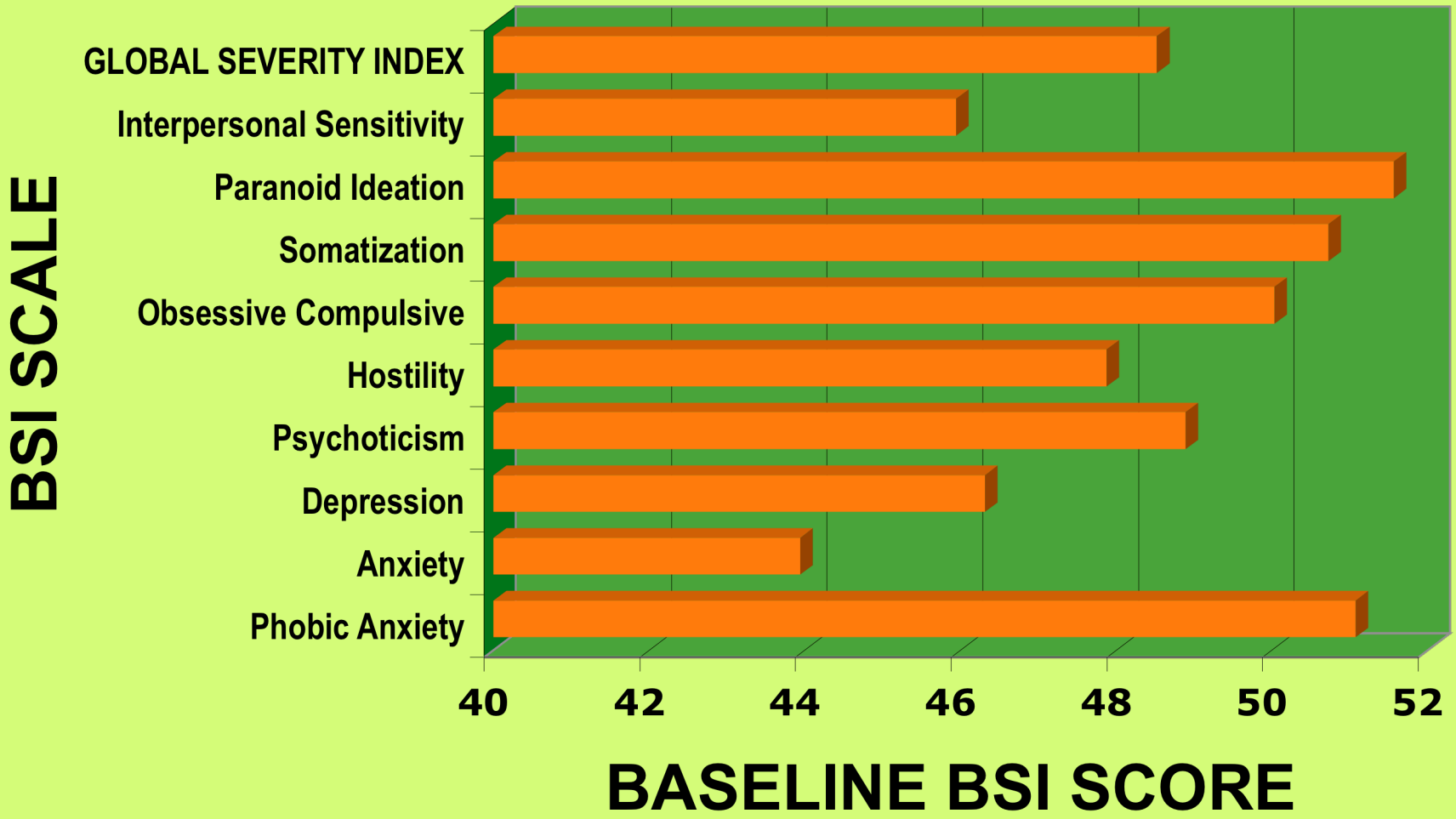


Working Alliance Inventory (WAI) for Patients improved 3.8% after MI was implemented (*p=0.021). Patients with greater increases in *Change Talk* had greater increases in WAI score.

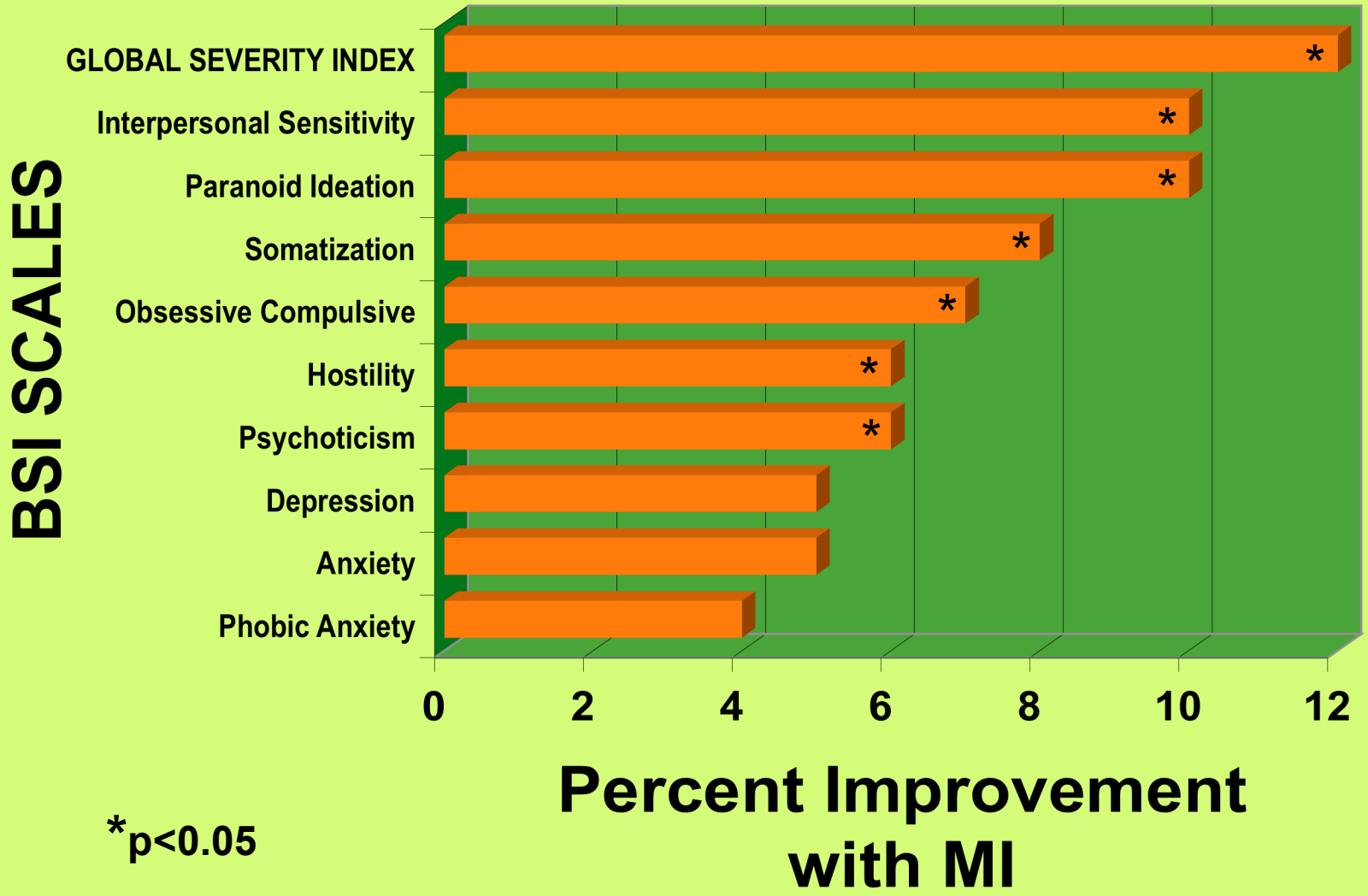
WAI for Therapists began higher than Pts WAI and improved 11.2% after MI was instituted (*p=0.015). Therapists with <u>fewer</u> *Years in Practice* exhibited greater increases in their WAI scores.



Baseline BSI Scores



Impact of MI on BSI



*p<0.05

MISC and BSI Scores

- Inclusion of 7 key MI Skill Code variables in the HLM analysis revealed that most had no significant relationship with patient outcomes, e.g., BSI scores. However . . .
- Increase of patient *Change Talk (CT)* was associated with greater benefits on OCD, Interpersonal Sensitivity, Depression, Anxiety, Paranoid Ideation, & Psychoticism scales.
- Increase in *Therapist Empathy* was associated with more improvement on Somatization & Hostility scales.
- Somatization improved more for *New* than *Established* patients
- High therapist *MI Spirit* was associated with better BASELINE scores on the Paranoid Ideation scale.

Substance Use and Readiness to Change

- Patients' reported Readiness to Change (RTC) alcohol or drug use was not altered after implementation of MI.
- RTC taking medication for emotional problems did improve; the amount of change related to therapist attributes such that:
  - Patients who increased their *Change Talk* had significantly higher Readiness to Change scores
  - Patients working with Therapists who had more *Years in Practice* had significantly higher RTC scores
- Virtually no changes in overall substance use behavior were reported by the patients, however
  - When patient *Change Talk* increased, reported drug use declined significantly.

Discussion

- Patients with COD are difficult to engage in treatment.
- MI has demonstrated efficacy with patients who abuse substances and probably those with COD.
- We previously reported that these therapists attained MI proficiency with this training protocol; also that their patients increased *Change Talk* after implementing MI.
- Finally, we hypothesized that increased *Change Talk* would relate (lead) to improved clinical status.
- Here, we report significant patient improvement in several psychiatric dimensions related to patient *Change Talk*.
- This was not true for substance use behavior, possibly due to initial low levels of substance abuse.