UNIVERSITY of WASHINGTON

HARBORVIEW MEDICAL CENTER
UW Medicine

Changes in clinician attitudes following implementation of contingency management in a community mental health care setting

Frank Angelo BS, Debra Srebnik PhD, Andrea Sugar BA, Patrick Coblentz BS, Michael McDonell PhD, Jessica Lowe BA, Richard Ries MD

Funding provided by the National Institute on Drug Abuse - R01 DAO22476-01 (PI: Ries)

Contingency Management (CM)

- CM demonstrates the largest reduction in substance abuse relative to other psychosocial treatments for SUDs (Durta et al., 2008)
- Pilot studies and our recently completed RCT suggest that CM is associated with reductions in drug and alcohol use in severely mentally ill (SMI) adults
- CM can easily be added to treatment as usual in a community mental health or addiction treatment setting
  - Does not require extensive training
  - Can be implemented by non-clinical staff

Parent Study: Contingency Management for Stimulant Use in Adults with Serious Mental Illness

Design: RCT comparing CM to a quasi-yoked control condition

- CM targeted stimulant use in SMI adults
- 3 months of tx, 3 months of follow-up
- Baseline interview, and monthly interviews during tx and follow-up
- Utilized variable-magnitude reinforcement procedure (Petry et al., 2005)

Current Study

Primary Aim:

To examine changes in clinician attitudes following the implementation of a contingency management research study in a community mental health care setting.

Measure

Provider Survey on Incentives (Kirby, Benishek, Dugosh, & Kerwin 2006)

- 43 items
- 5 point Likert-type scale from *Strongly Disagree* to *Strongly Agree*
- Modified to fit Contingency Management-based incentive program

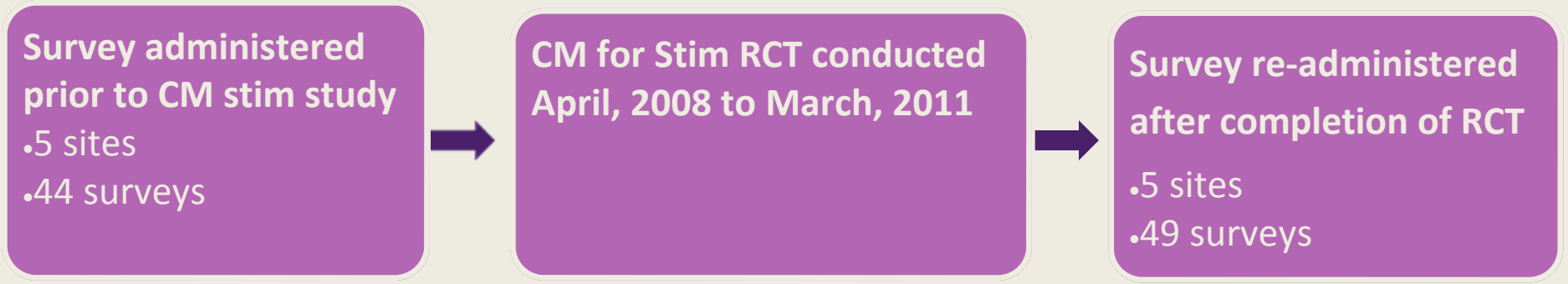
Examples:

Overall, incentives are good for the consumer/counselor relationship.

Incentives are not useful for short-term treatments

Design

Pre-post design comparing agency-wide provider survey opinions about CM before and after a CM RCT



Sample (N=80)

Medical providers, clinicians, and staff of an adult outpatient community mental health care clinic

Professional History	Mean	SD
Years of Education	16.91	SD 1.8
Years in MH or SUD field	8.54	SD 7.44
Clinic role	**N**	**%**
Mental health provider	60	73.2%
Addiction provider	10	12.2%
Trained co-occurring tx provider	7	8.5%
% in recovery SMI or SUD	20	25%
Position	**N**	**%**
Case manager	40	50.0%
Clinical staff	25	30.4%
Administrative and supervisory	7	8.5%

Data analysis

A factor analysis was performed on the 43 items of the PSI

- 3 factors were revealed
  1. Positive and negative opinions about incentive based programs
  2. Moral/philosophical objections to incentive based programs
  3. Cost of incentive based programs

General estimating equations (GEE) were used to analyze the change in the factor means between pre-intervention and post-intervention

- GEE was used because 11 members of our sample had both pre and post interviews.
  (Clinic focus MH/CD, years of education, and within subject variance were controlled for.)

Factor 1: Positive and negative opinions of incentives

Factor load	item
.80	Incentives are more likely to have positive effects on the consumer/counselor relationship than they are to have negative effects.
-.74	Incentives are more likely to have negative effects on the consumer than they are to have positive effects.
-.71	Overall, incentives have negative effects on the consumer/counselor relationship.
.70	Any source of abstinence motivation, not just internal motivation, is a good thing for treatment.

Factor 2: Moral/philosophical objections

Factor load	item
.75	It isn't right to give incentives to someone for being clean when they aren't fulfilling their other treatment goals, such as attending groups.
.69	Incentives will stop the consumer from seeing beyond the external reward and prevent them from realizing their internal motivation.
.67	Incentives are not right because they are rewarding the consumer for what he/she should be doing in the first place.
.66	It isn't right to give an incentive to consumers for goals such as attendance when they aren't testing drug negative (clean).

Factor 3: Cost

Factor load	item
.86	My treatment facility could not find funds for tangible incentives that cost $50 per consumer per month.
.75	My treatment facility could not find funds for tangible incentives that cost $10 per consumer per month.
.64	I wish I could provide out consumers with incentive rewards, but I don't see how it's affordable
.62	My treatment facility could not find funds for tangible incentives that cost $150 per consumer per month

Demographic correlations

- Variables recoded, 1 represents negative regard and 5 represents positive regard

Correlate of Total score

- Type of provider, MH, SUD, or COD; F(2,84)=2.962 , p=.057
- Clinic focus MH/CD; t (78)=3.15, p=.002*

Correlates of Factor 1 (pos/neg opinions)

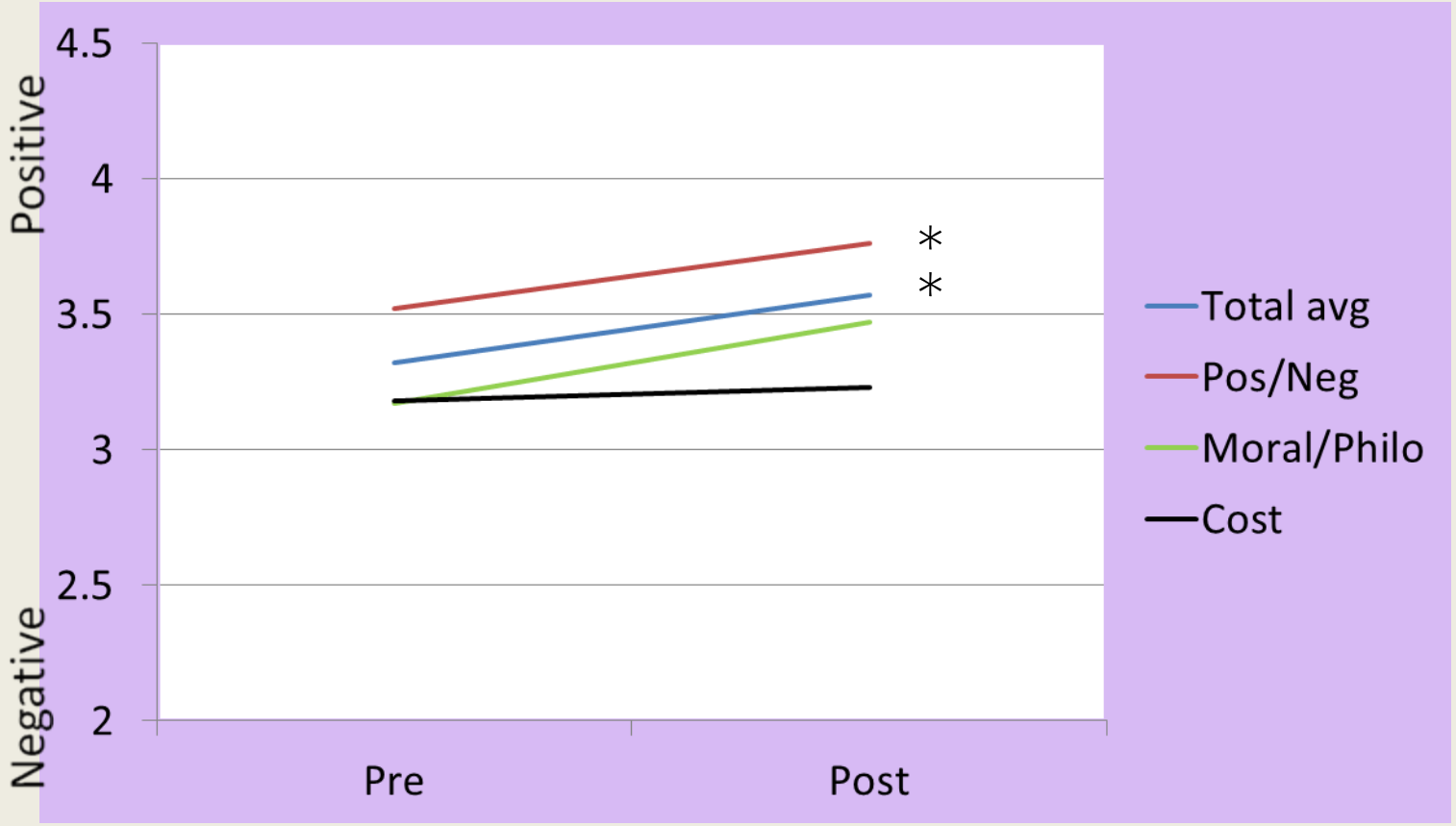
- Type of provider, MH, CD or COD; F(2,84)=5.41, p= .006*
- Years of education; r=-.213, N=91, p=.043*
- In recovery from SUD; t(77)=-2.48, p=.015*

Correlate of Factor 2 (moral/philo objections)

- Number of years in field; r=.26, n=91, p=.009*

Graph

- Graph pre/ post of three factors



Comments from clinicians:

What are your thoughts about CM?

- “Incentives give some level of motivation to people who have none. Incentives also focus on what people have done right, not what they have done wrong.”
- "I have seen clients do really well who have a history of not being able to stay clean.”
- “It helps the clients build pride and confidence by giving them tangible rewards for treatment/goal achievements.”

Study Limitations

- High staff turn over resulted inability to examine within-subject changes in CM attitudes.
  - Typical of CMHCs
- Data gathered at single CMHC agency.

Conclusion

Current Study

- Opinions of CM are overwhelmingly positive
  - Study observed that CD counselors see CM as more favorable than mental health clinicians
  - Clinicians' opinions about contingency managements benefits and limitations improve after exposure to CM
  - Moral objections and cost issues are less amenable to change.
  - Like Kirby 2006, the most often positively endorsed statements were:
    - An advantage to incentive programs is that they focus on what is good in the consumer's behavior.
    - Any source of abstinence motivation, not just internal motivation, is a good thing for treatment.

Conclusion

- **Implications for dissemination/implementation**
  - Experience may help improve opinions about CM
  - Specific focus on education and demonstration of CMs efficacy with non-empirical data (videos/case examples) may be necessary for theoretical objections

Thank you to……

<u>Seattle's Community Psychiatric Clinic</u>

- Clients
- Clinic Leadership
- Clinic Staff