

Research on Improving Continuing Care

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Outline of the Talk

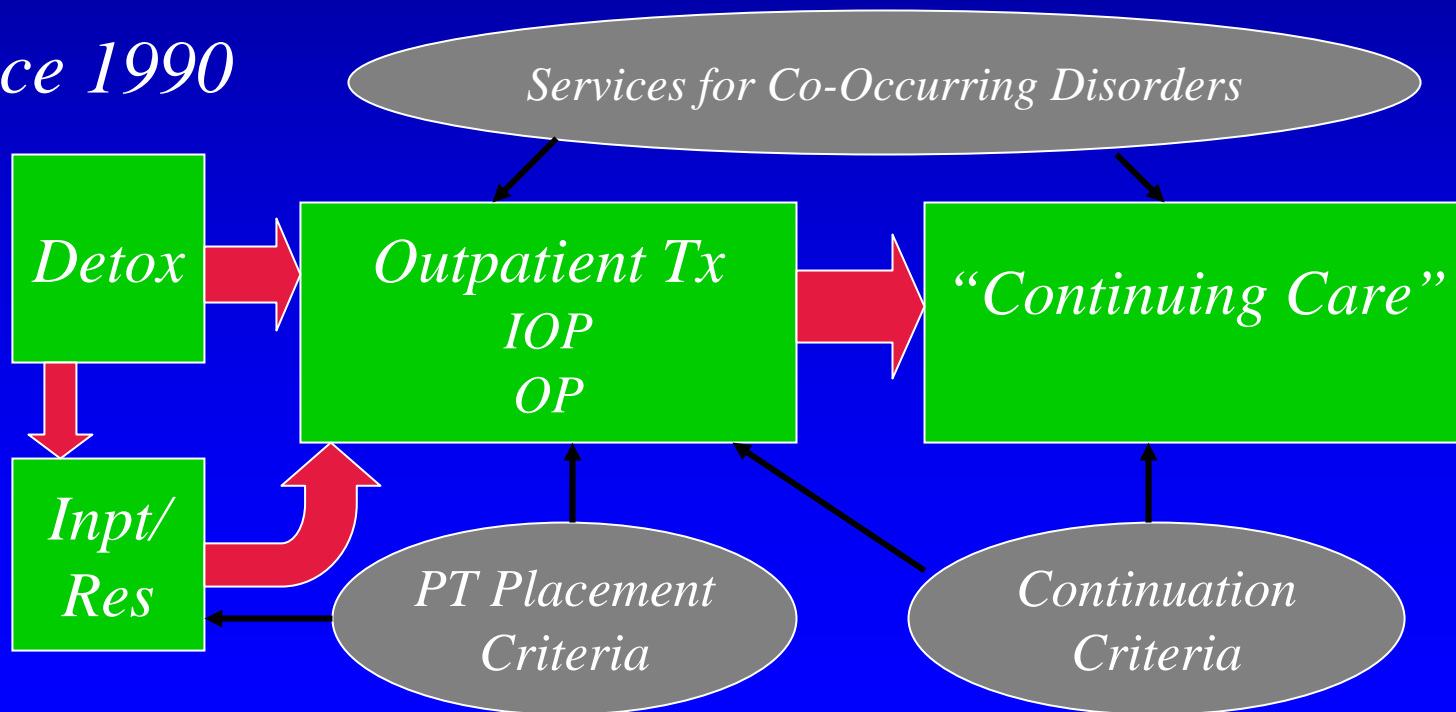
- Characteristics of effective continuing care interventions
- Methods to improve engagement and retention in continuing care
- A look at telephone-based continuing care
- Can flexible treatment algorithms further improve outcomes in continuing care?
- Final thoughts

Continuum of Care in the Addictions

Prior to 1990



Since 1990



What Kinds of Continuing Care are Available?

- Self/mutual help programs
- Traditional counseling visits
 - Usually group therapy
 - 3-6 months in duration
 - 12 Step orientation
- CBT-based continuing care available in some facilities

Findings from Review of Continuing Care Studies

- Of 20 controlled studies in past 20 years, 10 (50%) yielded significant treatment condition effects
- Of 7 experimental studies of methods to improve retention, 7 (100%) yielded positive findings

Trends in Findings from Controlled Studies

- Factors associated with greater likelihood of significant treatment effects:
 - *More recent publication date*
 - *Longer planned duration of continuing care (i.e., 12+ months)*
 - *More active/assertive approaches to delivering continuing care to the patient*
- Conversely, intensity and theoretical orientation of intervention less important

McKay (in press, 2008)

Effective Continuing Care

- Home visits by a nurse over 12 months (Patterson et al., 1997)
- Couples Behavioral Marital Therapy-- 12 months tx (O'Farrell et al., 1998)
- Extended follow-up telephone contacts (12 months) (Foote & Erfurt, 1991)
- Assertive Aftercare (Godley et al., 2006)
- Telephone-based continuing care (Horng & Chueh, 2004; McKay et al., 2005)
- Comprehensive community re-integration (Brown et al., 2004)
- Coping skills-based interventions (Bennett et al., 2005; McAuliffe & Ch'ien, 1986; Sannibale et al., 2003)

Effective Methods to Improve Retention in Continuing Care

- Small monetary incentives (Chutuape et al., 2001)
- Active handoffs, referrals, outreach (Chutuape et al., 2001; Coviello & Zanis, 2006; Timko et al., 2006)
- Case management (Siegal et al., 2002)
- Telephone encouragement (Hubbard et al., 2007)
- Contracting, prompts, social reinforcement (Lash et al., 2007)

Research on Telephone Continuing Care

Advantages of the Telephone

- Potential to promote better long-term engagement and participation because:
 - Convenient for client
 - Reduces stigma of weekly trips to the treatment program
 - Individualized attention

First Penn Telephone Study

- Patients:
 - 359 graduates of 4-week IOP programs
 - Alcohol and/or cocaine dependent
- Continuing care treatment conditions:
 - Standard group counseling (STND)
 - Individualized relapse prevention (RP)
 - brief telephone-based counseling (TEL)

Continuing Care Conditions

- **Telephone Monitoring and Counseling**
 - Weeks 1-4, patients make a 15 minute call and attend a “transition” group (1x/week @)
 - Weeks 5-12, patients have telephone contact only (1x/week)
 - During calls, patients report results of self-monitoring and progress toward 1-2 goals, and plan goals for next week
 - Patients use a workbook that structures intervention for each week.

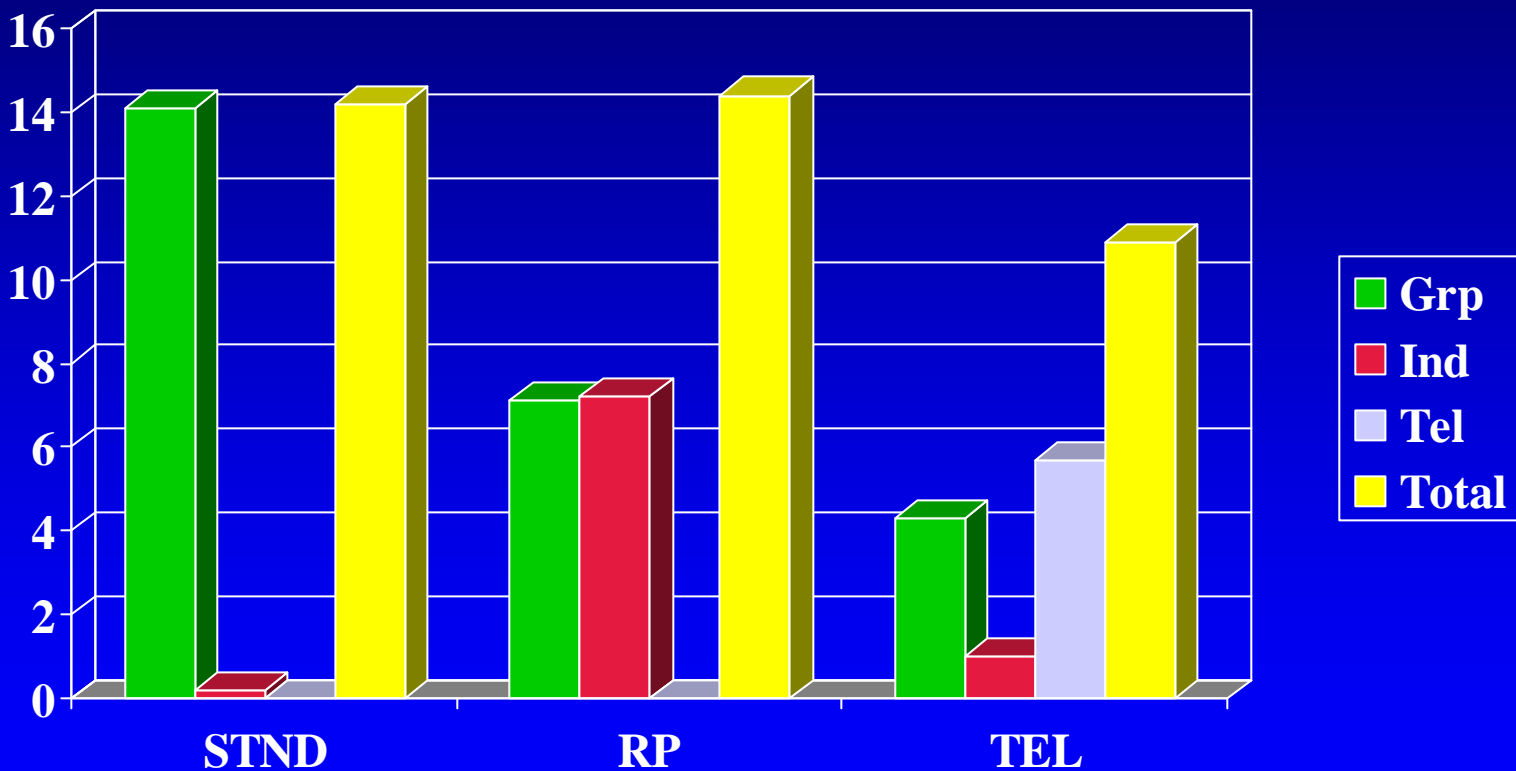
Content of Telephone Contacts

- Common ingredients of effective treatments
 - Monitoring of symptoms and progress
 - Identification of problems and barriers to recovery
 - Emphasis on concrete planning and problem solving
 - Activate the patient—take charge of own recovery

Who are the Telephone Counselors?

- We have used experienced addictions counselors in most of our studies
- However, peer counselors are used in many places
- Caron Treatment Centers uses people with no formal mental health or addictions counseling training
- Key is to match qualifications of telephone service providers to nature of the intervention (e.g., monitoring/support only vs. formal counseling)

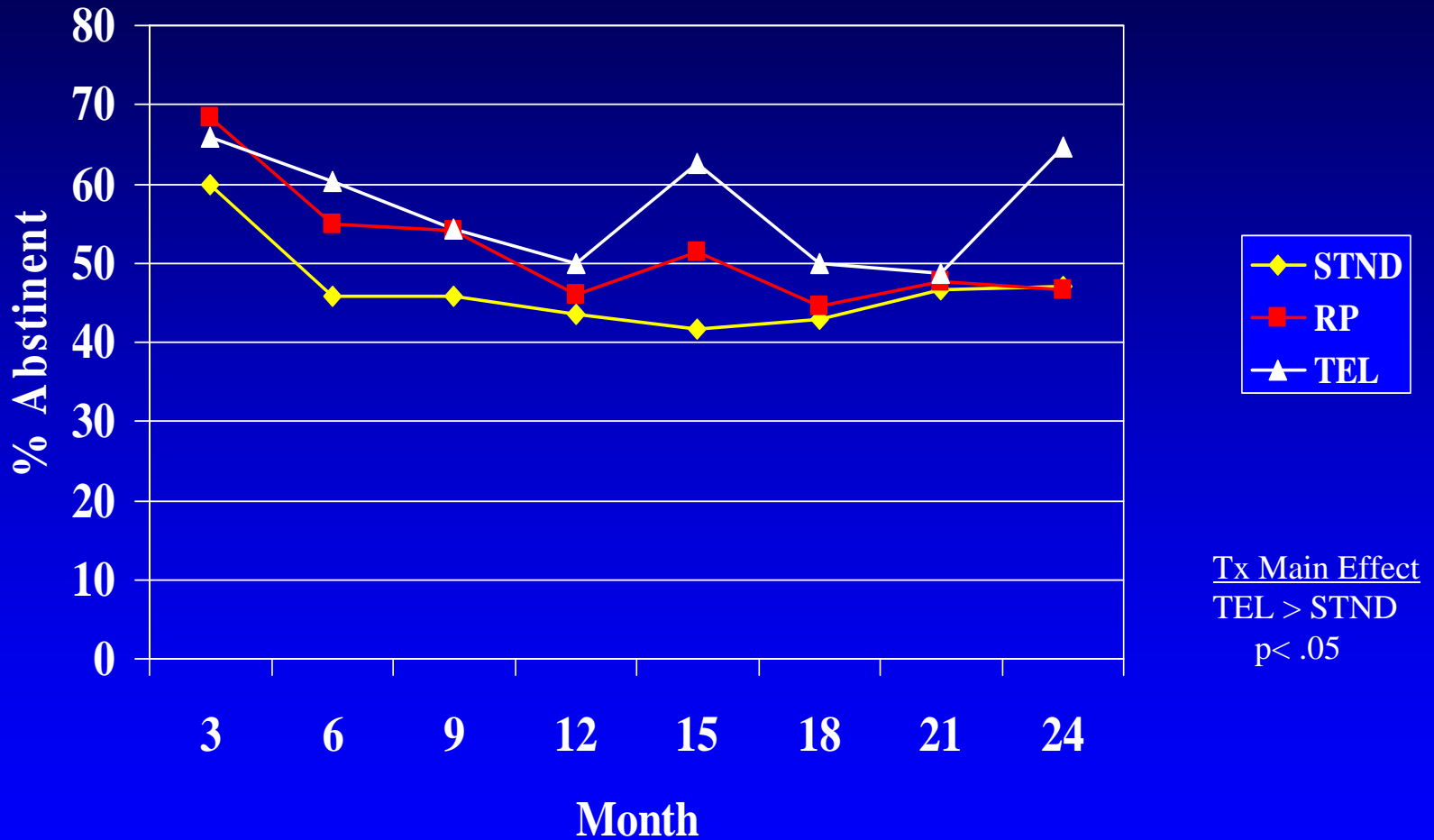
Number of Sessions Received



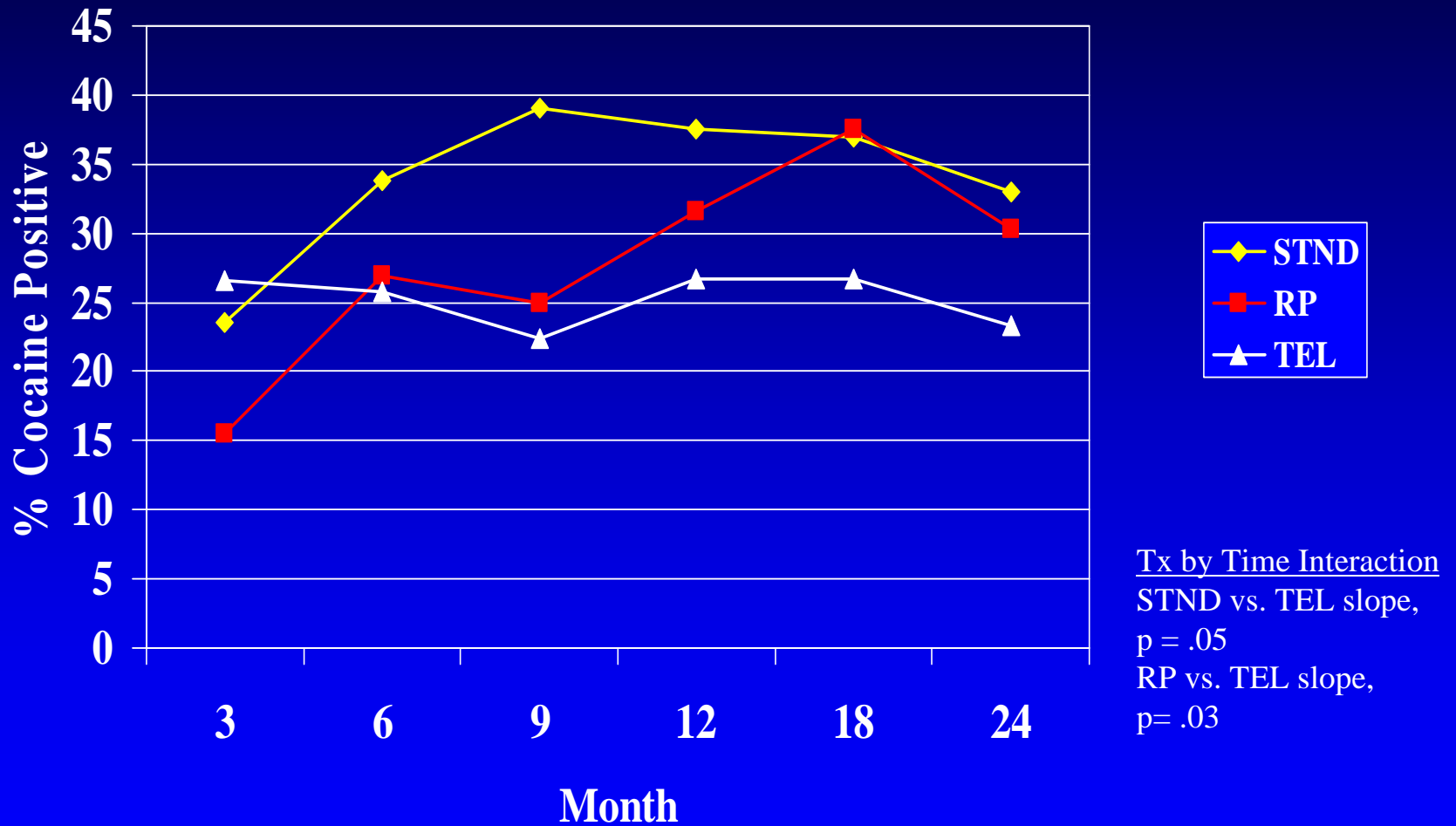
Pts attending $\geq 75\%$ of planned sessions: STND= 37%, RP= 47%, TEL= 57%

Alcohol and Drug Outcomes

Total Abstinence Rates



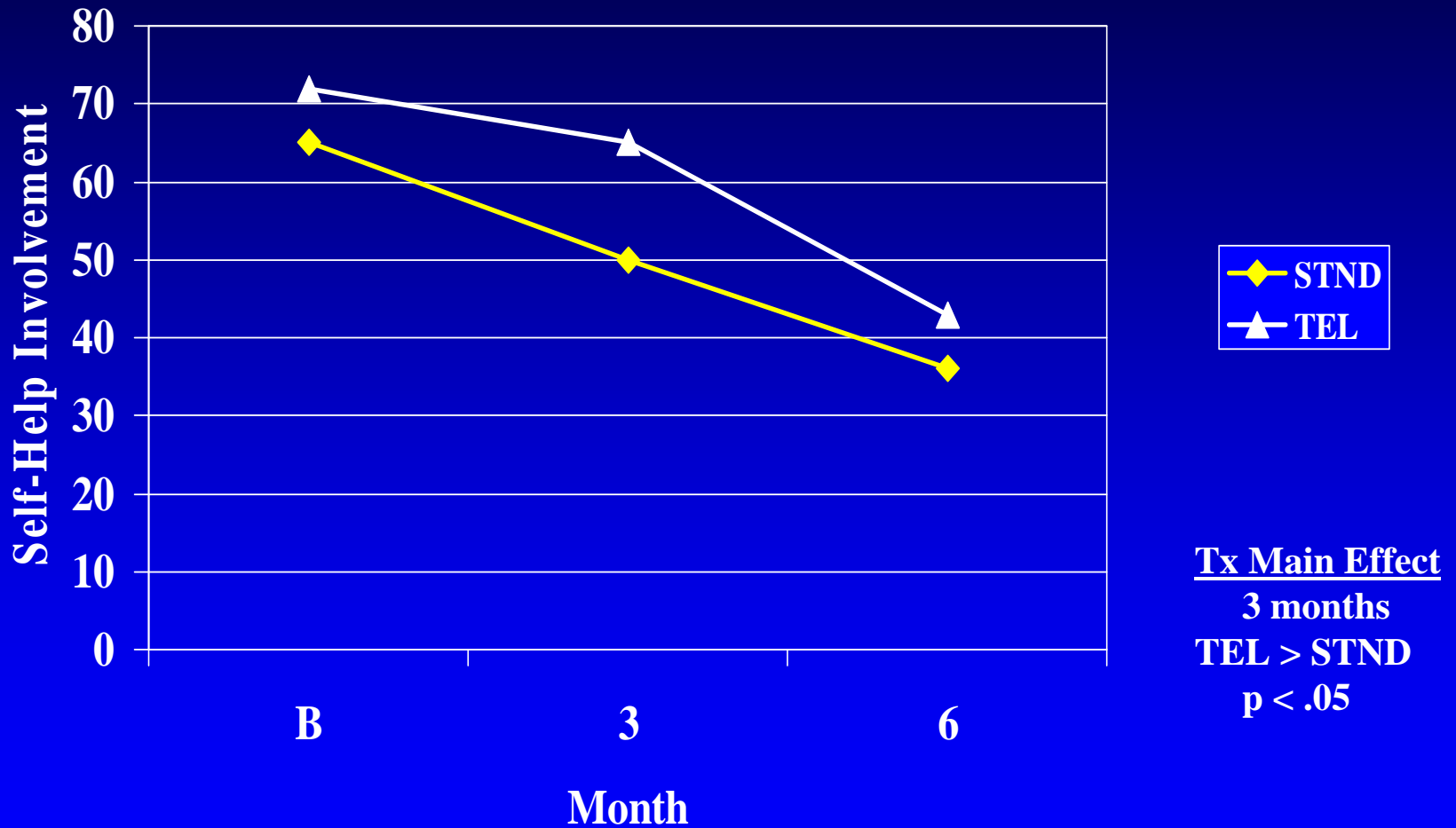
Cocaine Urine Toxicology



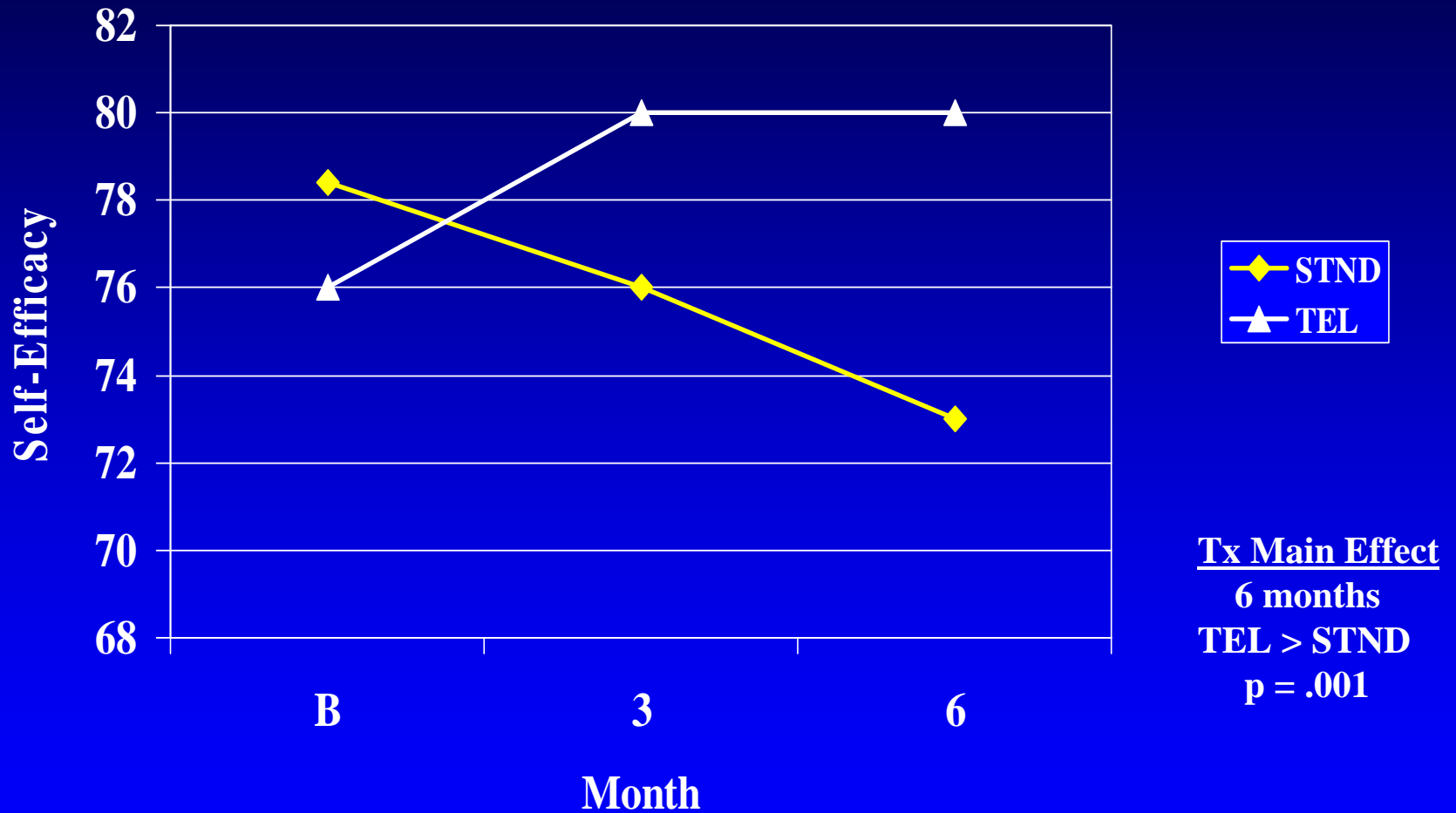
What Accounts for Therapeutic Effect of Telephone Continuing Care?

Mensingher et al., (2007) Journal of Consulting and Clinical Psychology

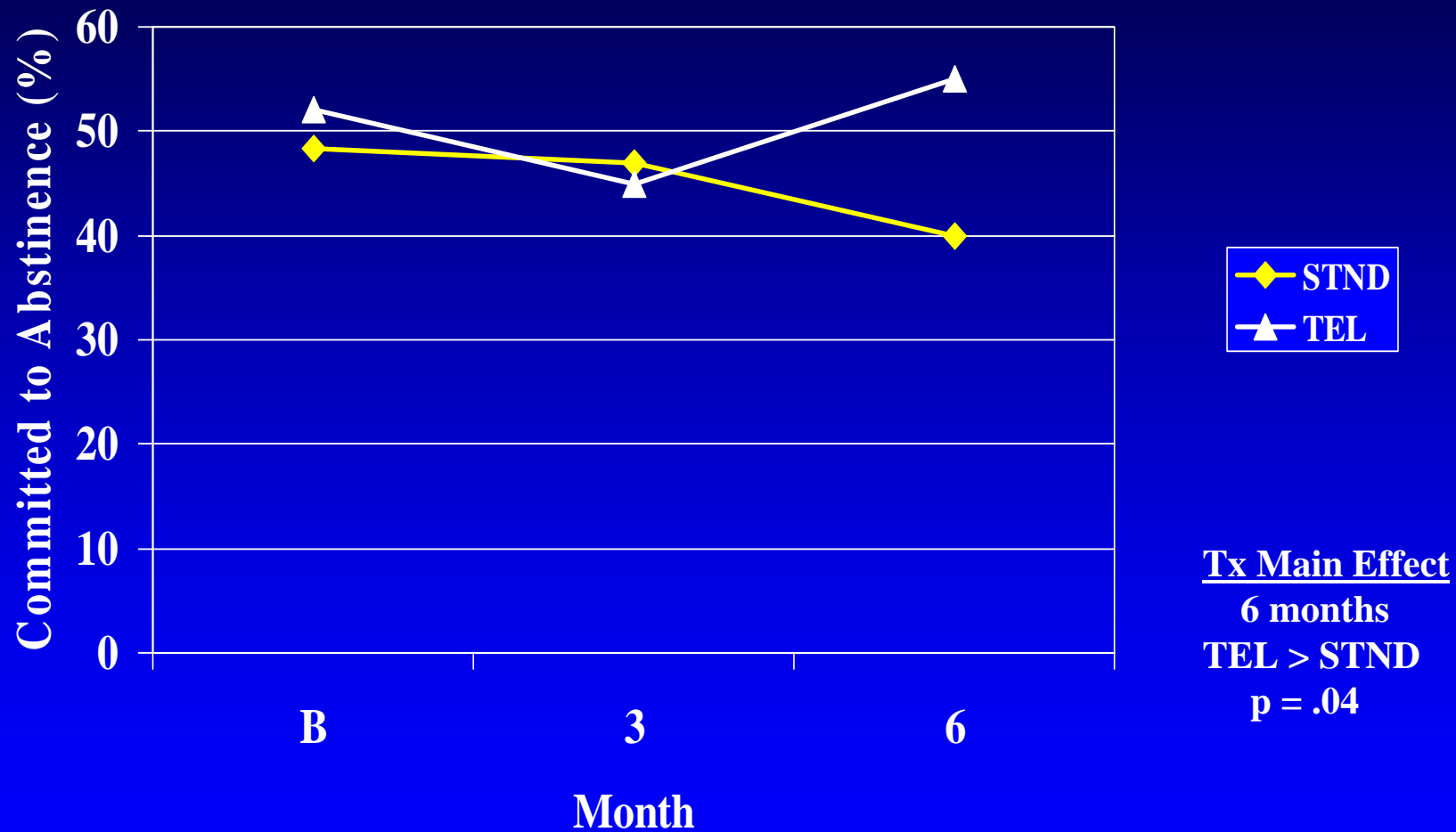
Treatment Condition Effect on Self-Help Involvement



Treatment Condition Effect on Self-Efficacy



Treatment Condition Effect on Commitment to Abstinence



Extended Telephone-Based
Protocol for the Management of
Alcohol Dependence

Study Design

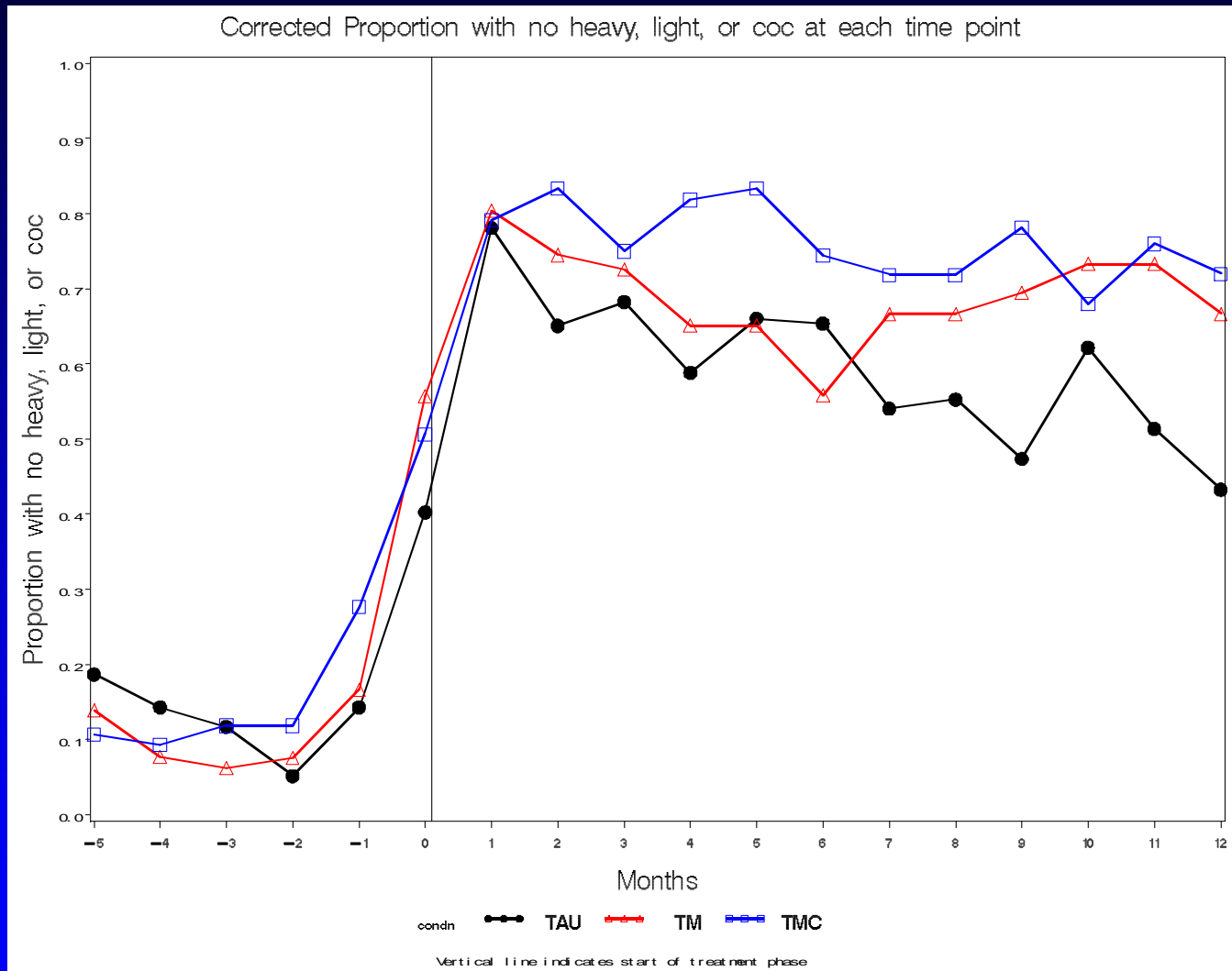
- Patients: Alcohol dependent clients recruited at 2 weeks from IOPs
- Treatment conditions:
 - Treatment as usual (TAU)
 - TAU plus TEL monitoring only (TM; 18 months)
 - TAU plus TEL monitoring and counseling (TMC; 18 mo.)
- Outcomes assessed over 24 months
- 252 randomized participants in the study

Telephone Calls

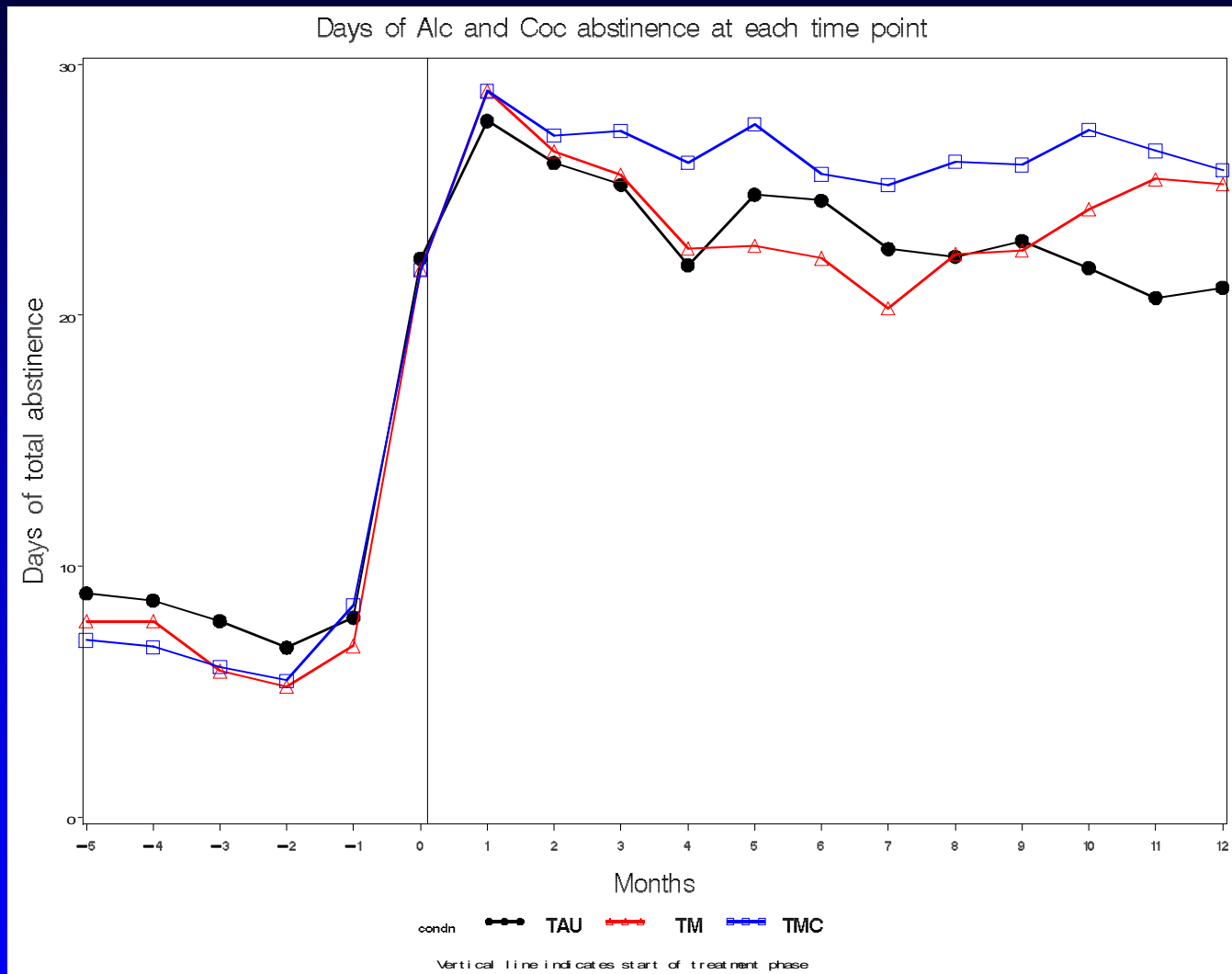
- Weekly, titrated to bimonthly, then monthly
- Structure and content of the calls:
 1. Assess current risk and protective factors
 2. Provide feedback on risk level
 3. Review progress/goals from last call
 3. Identify upcoming high-risk situations
 4. Select target for remainder of call
 5. Brief problem-solving regarding target concern(s)
 6. Set goal(s) for interval before next call

Preliminary Results

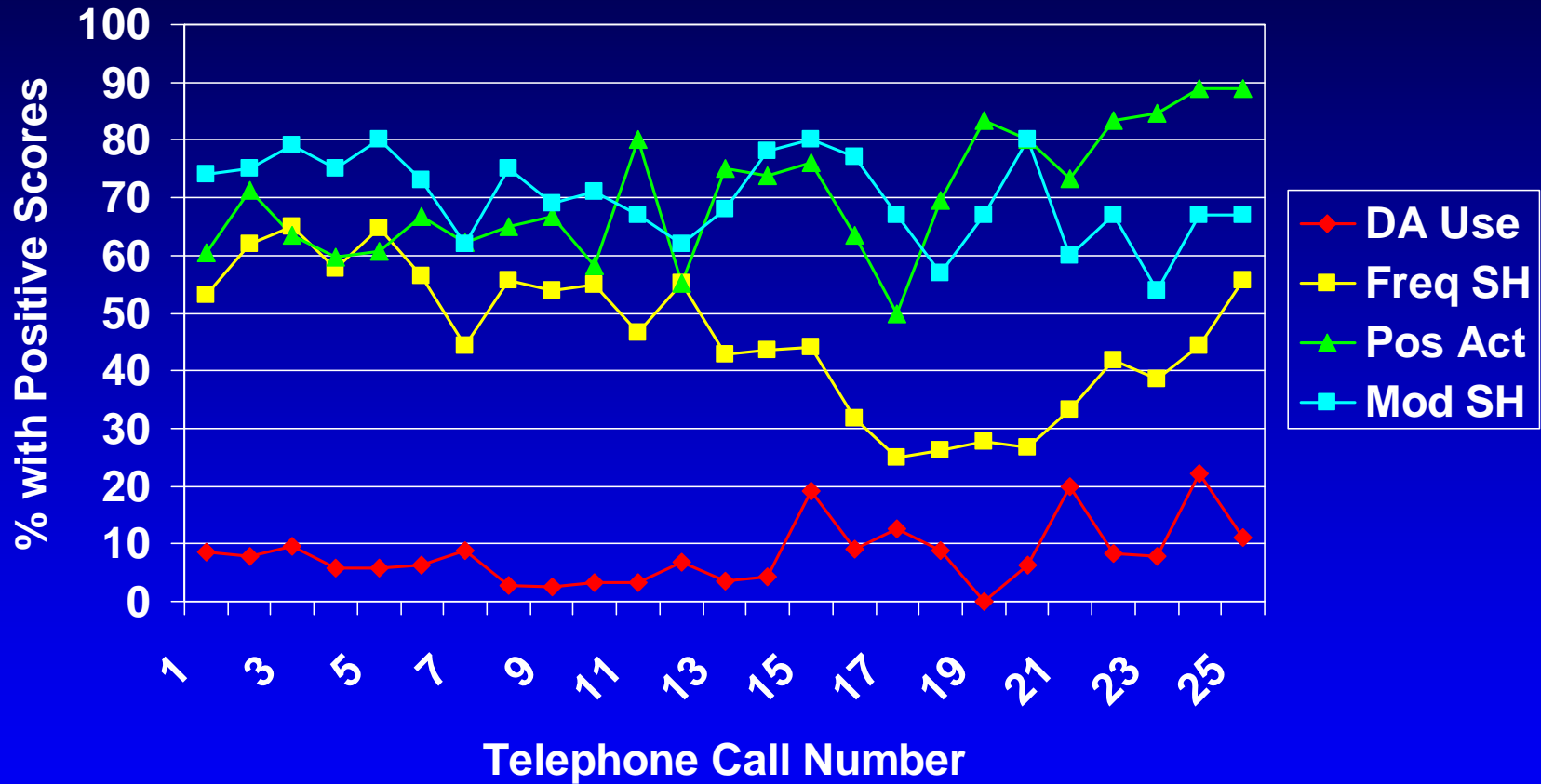
Percentage with No Alcohol or Cocaine Use in Each Month of Follow-Up



Days of Abstinence in Each Month of the Follow-up



Data on Risk/Protective Factors



Mod SH= % attending Self-Help \geq 2 time/week

Freq SH= % attending Self-Help \geq 4 times/week

Pos Act= % engaged in pro-recovery activities \geq 4 times/week

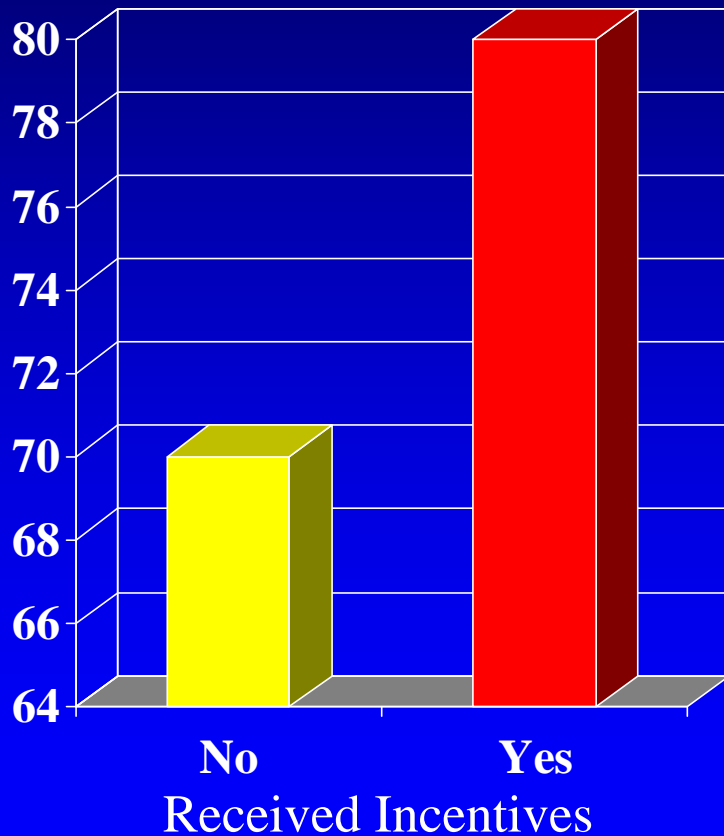
Extended Telephone-Based
Protocol for the Management of
Cocaine Dependence

Design

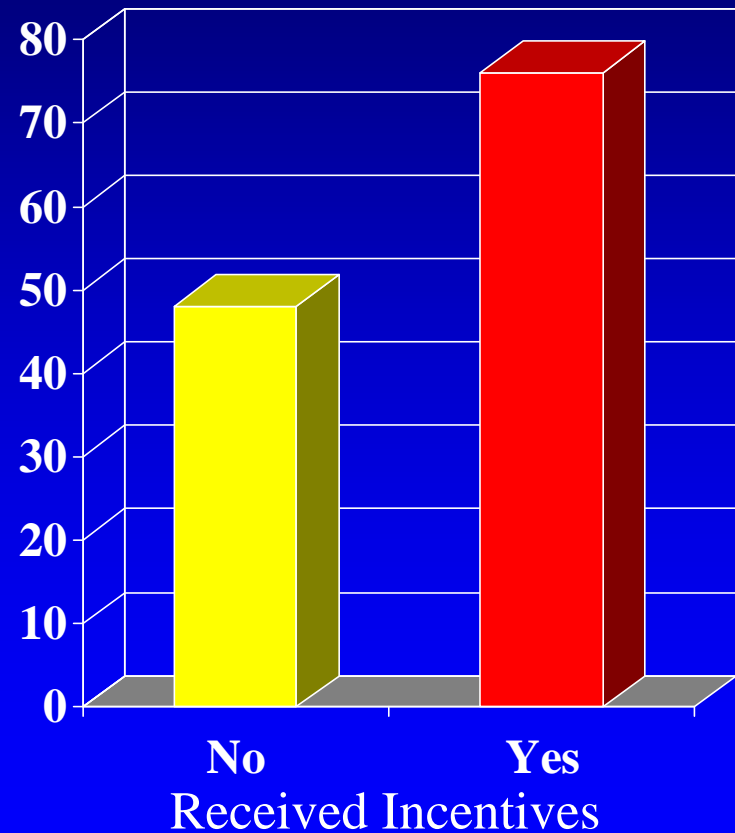
- Patients: Cocaine dependent IOP participants still attending in week 2
- Treatment conditions:
 - Treatment as usual (TAU)
 - TAU plus telephone counseling (24 mo.)
 - TAU plus telephone counseling (24 mo.), plus incentives for participation and cocaine-free urines (first 12 mo)
- Outcomes assessed over 24 months

Impact of Incentives on Telephone Continuing Care Participation

Percent Attending Orientation

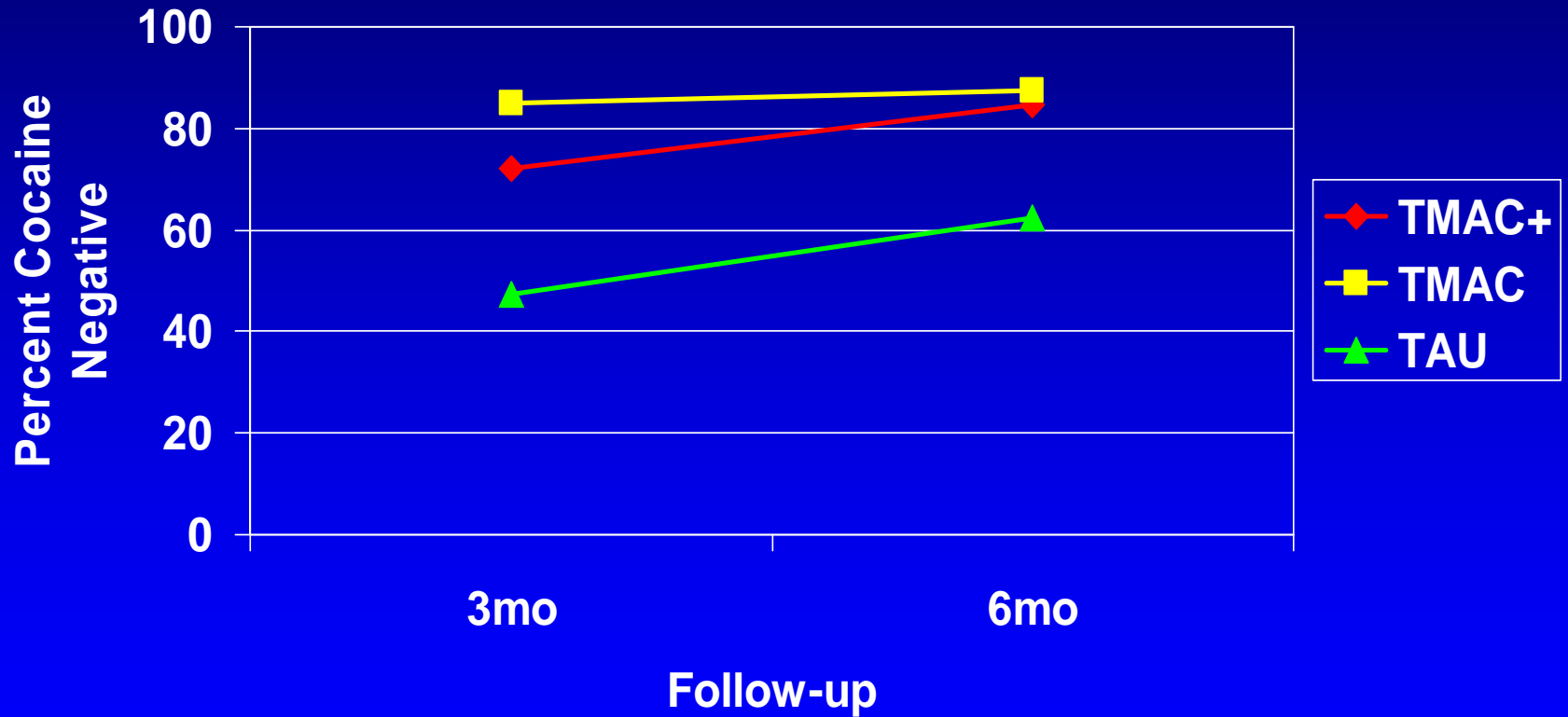


Percent Possible Calls Completed



Very Preliminary Outcome Results

Cocaine Urine Test Results



How to Further Improve
Retention and Outcomes in
Continuing Care

“Adaptive Treatment”

What to do when patients are not responding well to treatment??

- In research studies– stay the course!
- In the “real world”-- good clinicians usually alter treatment in some way
- However, this is usually done on the basis of personal experience, not with a protocol or algorithm

In Adaptive Treatment Protocols...

- Treatment is tailored or modified on the basis of measures of response (e.g., symptoms, status, or functioning) obtained at regular intervals during treatment
- Goal is to deliver the treatment that is most effective for a particular patient at a particular time.
- Rules for changing treatment are clearly operationalized and described.....

“If.....Then”

Summary of Possible Adaptations

- Non-responders
 - Step up (e.g., OP to IOP or residential)
 - Lateral move (e.g., CBT to TSF)
 - Modality change (e.g., CBT to medication)
 - Step down (e.g., IOP to telephone monitoring)
- Responders
 - Reduce frequency of intervention (e.g., IOP to OP)
 - Change to lower burden intervention (e.g., OP to periodic check-ups, or e-treatment)

Developing Adaptive Treatment Protocols

“Best Existing Evidence” Approach

- Devise adaptive protocol on the basis of:
 - Expert clinical judgment
 - Feedback from patients
 - Prior research findings
 - Face validity
- Compare that adaptive protocol to TAU or other treatment in standard RCT
- Pros and Cons: Relatively fast, but hard to know what went wrong if the protocol doesn't work

Example: Telephone Adaptive Protocol

- Increases in services triggered when risk reaches moderate level
 - *First*: increase frequency of phone calls
 - *Second*: bring patient in for 1-2 face-to-face evaluation and motivational interviewing (MI) sessions
 - *Third*: provide 8 CBT relapse prevention sessions
 - *Fourth*: refer back to IOP

Recovery Management Checkups

- Protocol developed by Dennis, Scott et al.
 - Interview patients every quarter for 2 years
 - *If patient reports any of the following.....*
 - Use of alcohol or drugs on ≥ 2 weeks
 - Being drunk or high all day on any days
 - Alcohol/drug use led to not meeting responsibilities
 - Alcohol/drug use caused other problems
 - Withdrawal symptoms
 - *.....Patient transferred to linkage manager*

RMC

- Linkage Manager provides the following:
 - Personalized feedback
 - Explore possibility of returning to treatment
 - Address barriers to returning to treatment
 - Schedule an intake assessment
 - Reminder cards, transportation, and escort to intake appointment

Results: RMC vs. TAU

- *Time to return to treatment*
376 vs. 600 days ($p < .05$)
- *Total days of treatment*
62 vs. 40 days ($p < .05$)
- *In need of treatment at 24 months*
43% vs. 56% ($p < .01$)
- *In need of treatment in at least 5 quarters*
23% vs. 32% ($p < .05$)

Recent modifications to RMC included:

- Switch to from off- to on-site urine monitoring with immediate feedback on results
- Transportation assistance for everyone to improve the show rates for assessment and treatment
- Improved Quality Assurance/Adherence
- Engagement assistance to improve the rates of staying at least 14 days
 - Daily contact (mostly face to face)
 - Acting as an ombudsman
 - Agreement from provider not to administratively discharge from treatment without contacting us first

Adaptive Primary Care Protocols for Heavy Drinkers

- Kristenson et al. (1983, 2003)
 - Patients randomized to visits with a nurse (every month) and physician (every 3 months), vs. TAU
 - Both provided for up to 4 years
 - GGT levels monitored, and treatment/drinking goals modified on basis of scores
 - Results: fewer sick days, fewer hospital days, lower mortality over 6 and 16 years than TAU

Experimental Design for Developing Adaptive Protocols

- Use randomization to develop optimal adaptive treatment strategies
 - Example: What to do with early non-responders?
 - Switch treatment?
 - Augment treatment?
- Determine the set of decision rules and interventions that produce the highest percentage of responders

THEN.....

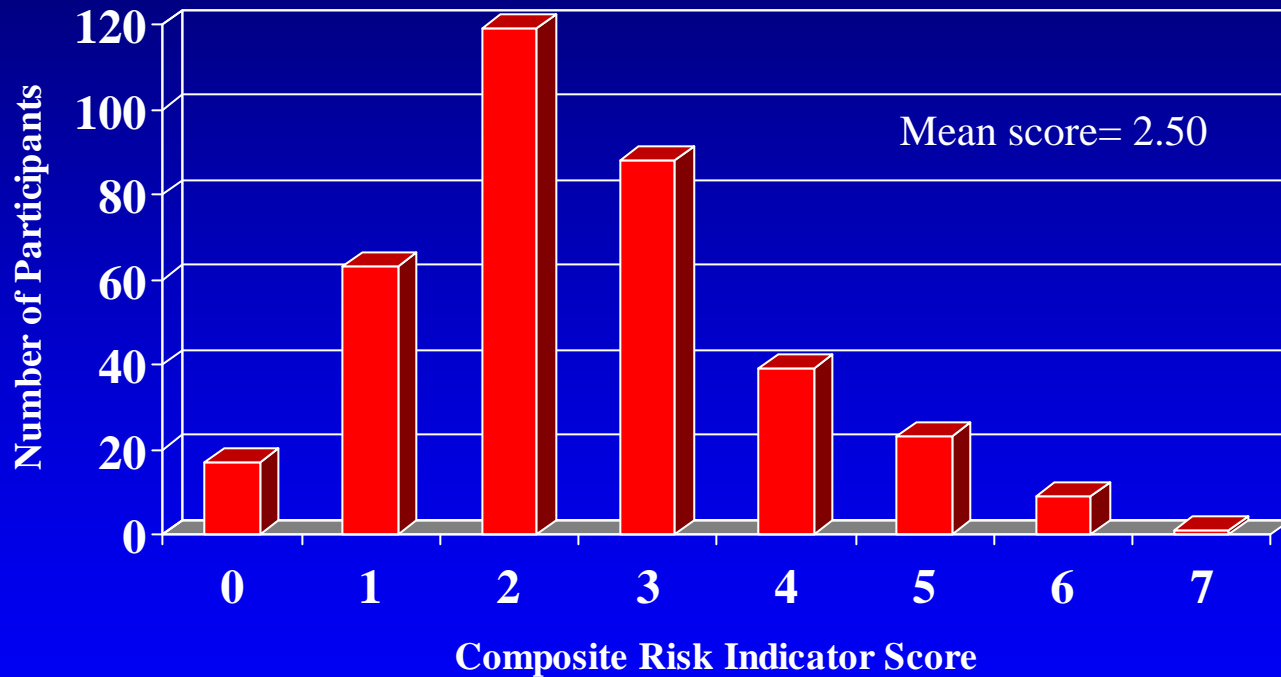
- Compare the optimal adaptive protocol to TAU or other treatments in standard RCT

Using Progress in IOP to Select Optimal Continuing Care Approaches

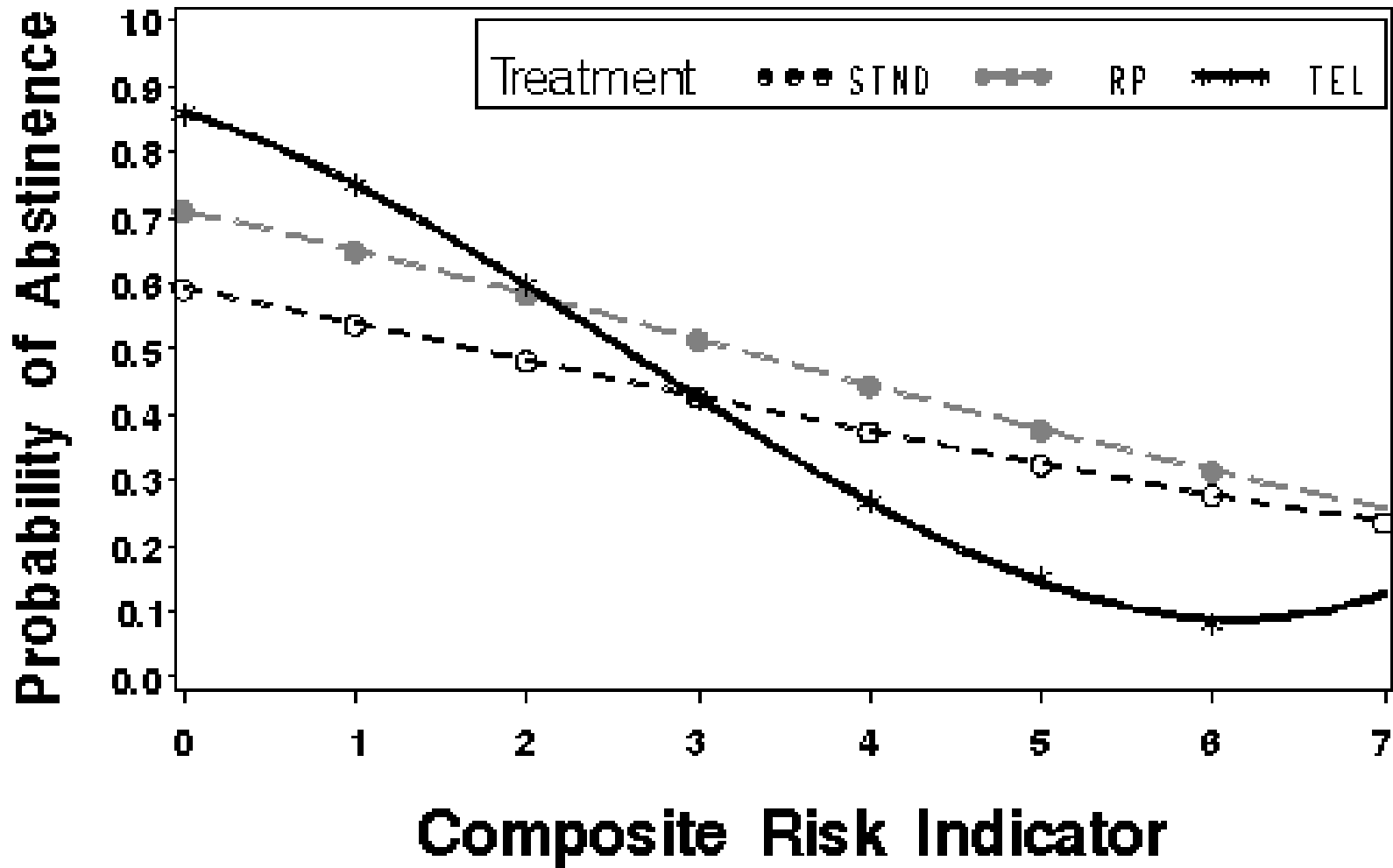
7-Item Composite Risk Indicator

- Key therapeutic goals while in IOP:
 - Stop any use of alcohol
 - Stop any use of other drugs
 - Attendance at 3 or more self-help meetings/week
 - Good social support
 - Personal goal of absolute abstinence
 - Confidence in being able to use tools to cope
- Clients get a score of 0-7, based on how many goals they did not achieve (larger number = more goals not achieved)

Distribution of Scores on the Composite Risk Indicator



Months 7 to 9



TEL vs. STND contrast X Risk Index Score: $p < .05$

Conclusions

Extended Care Model for Addictions

- Intensity and/or frequency of treatment adjusted on the basis of patient progress
- Emphasis on making participation *more attractive* to the patients
 - Greater weight to patient choice
 - Use of more convenient forms of care whenever possible
 - Incentives for participation?
- Emphasis on more active outreach attempts to maintain therapeutic connections during continuing care.

Ongoing Challenge: Retention

- Keeping patients engaged is difficult, especially when deterioration occurs
- Need methods to increase compliance with adaptive changes, especially “step ups”
- Need to identify and offer alternative treatments for non-responders
- Resource allocation issue: How hard should counselors try to reach patients following dropout?

Collaborators

- Penn and TRI

- John Cacciola
- Deni Carise
- Donna Coviello
- Michelle Drapkin
- Kevin Lynch
- Tom McLellan
- Dave Oslin
- Helen Pettinati
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