



Karen Chan Osilla, PhD
1776 MAIN STREET
SANTA MONICA, CA 90401
V: 310.393.0411 x6074
F: 310.260.8150
E: karenc@rand.org

Karen Chan Osilla, PhD is an Associate Behavioral Scientist at RAND. Dr. Osilla has conducted addiction research including analyses of EAP utilization and referral patterns among clients with addictive behaviors (Chan et al., 2004) and adult drinking norms in the general US population (Chan et al., 2007). With funding from the University of Washington Alcohol and Drug Abuse Institute and a National Research Service Award (F31) from NIAAA, Dr. Osilla recently completed a pilot study examining the preliminary efficacy of a workplace screen and brief intervention through the EAP (Osilla et al., 2008). In addition, Dr. Osilla currently leads a RAND research group focused on worksite health promotion research. The group consists of over 30 researchers interested in various topics such as mental and physical health, addictive behaviors, children/family/aging, obesity, hard-to reach groups (e.g., Immigrants, women and underrepresented groups), stress, safety, and the environment, and healthcare benefits. As a group, they collaborate with companies to improve the health of employees and their families through the evaluation, development, and enhancement of existing and new health promotion programs.

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Enhancing Services for Clients with At-risk Drinking by Examining Outcomes

April 17, 2008

Karen Chan Osilla, PhD
 RAND Corporation
 Employee Assistance Society of North America

Developing Your Storyline

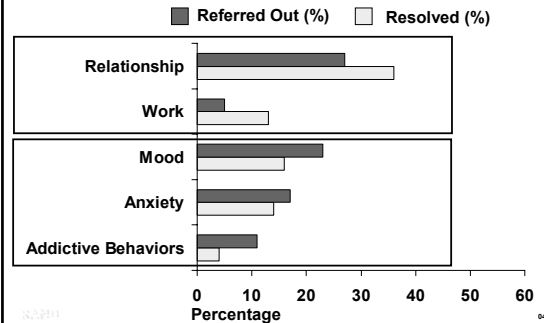
Step 1: Getting Ready

- At-risk drinking is costly to employers and families
- Large prevention potential to target employees before their drinking worsens
- How effective are EAP services among clients with addictive behaviors (ABs) compared to those with other concerns?
- Existing data (N=3890)
 - ABs (e.g., collapsed presenting problems of alcohol, drugs, smoking, eating disorders, etc.)
 - Problem Resolution (Yes/No)

Objectives

- Describe two research studies conducted with an EAP Corporation
 - Analysis of existing data among clients with addictive behaviors and other problems
 - Clinical trial examining an empirically based Screen and Brief Intervention and EAP usual care for at-risk drinking
- Demonstrate how to conduct an Outcomes Evaluation using these specific examples

Clients with Mood, Anxiety, and ABs Less Likely to Resolve Their Problems in the EAP



Roadmap for an Outcomes Evaluation*

Step 1: Getting Ready

Step 2: Choosing Outcomes

Step 3: Selecting Indicators

Step 4: Getting Data / Information

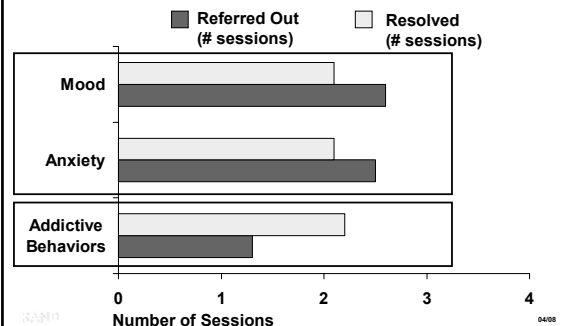
Step 5: Piloting / Testing

Step 6: Analyzing / Reporting

*(McNamara, 2008)

<http://www.managementhelp.org/evaluatn/outcomes.htm>

Clients with ABs are Referred Out of the EAP in Fewer Sessions



Developing Your Storyline (cont.)

Step 1: Getting Ready

- Clients with ABs were less likely to have their problems resolved in the EAP and were seen for fewer sessions compared to clients with other problems. They were also more likely mandated to the EAP.
- Implications: Outcomes were different among clients with ABs
- Next step: What is the added efficacy of Brief Intervention compared to EAP Usual Care on alcohol consumption and consequences?

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Be Specific with How You Want to Evaluate

Step 3: Selecting Indicators

- **Workplace Productivity:**
 - Health Performance Questionnaire (Kessler et al., 2003): <http://www.hcp.med.harvard.edu/hpq/>
 - **Absenteeism:** # of sick days and vacation days in the past 4 weeks
 - **Presenteeism:** 7 questions about the quality of their work (e.g., how often did you do no work, did not work as carefully as you should, had lower quality of work, etc.)

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Be Specific with What You Want to Evaluate

Step 2: Choosing Outcomes

- Outcomes of Interest:
 - At-Risk Drinking Screener, Frequency of Heavy Drinking, Alcohol-related Problems, Workplace Productivity (Absenteeism/presenteeism)
- Other measurement tools:
 - <http://casaa.unm.edu/inst.html>
 - <http://lib.adai.washington.edu/instruments/>

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Diving Deep into Data Collection: Who, What, When, Where, and How?

Step 4: Getting Data / Information

- **Who:** EAP clients screened for at-risk drinking
- **What:** Compare outcomes for clients who received EAP Usual Care or EAP Usual Care *plus* Brief Intervention
- **When:** Outcomes delivered after the first session and 3-months later
- **Where:** 5 EAP-staffed offices across 3 states (9 EAP therapists)
- **How:** \$30 to clients for 3-month follow-up

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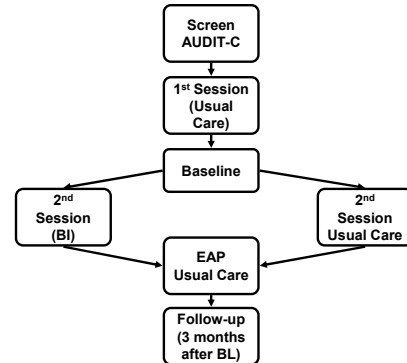
Be Specific with How You Want to Evaluate

Step 3: Selecting Indicators

- **At-Risk Drinking Screener (Babor et al., 1992):** First three questions of the AUDIT (aka AUDIT-C)
- **Heavy drinking:** # drinks on the heaviest occasion in the past month
- **Peak Blood Alcohol Content:** Calculated by heavy drinking quantity and hours, gender, and weight
- **Alcohol related problems (Miller et al., 1995):** 15-item measure called the Short Inventory of Problems (SIP)

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Osilla, K. C., Zellmer, S. P., Larimer, M. E., Neighbors, C., and Marlatt, G. A., (2008). A Brief Intervention for At-Risk Drinking in an Employee Assistance Program. *Journal of Studies on Alcohol and Drugs*, 69, 14-20. <http://www.jsad.com/>

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**Brief Intervention:
Personalized Graphic Feedback**

Typical Drinking Patterns Norms ¹ , BAC	Beliefs about Alcohol Misperceived Positive Expectancies
Drinking Situations	Negative Consequences

¹Chan, K. K., Neighbors, C., Gilson, M., Larimer, M. E., and Marlatt, G. A., (2007). Epidemiological Trends in Drinking by Age and Gender: Providing Normative Feedback to Adults, *Addictive Behaviors*, 32, 967-976.

**Getting to the Outcomes:
How did clients in the BI+EAP Usual Care do?**

Step 6: Analyzing / Reporting

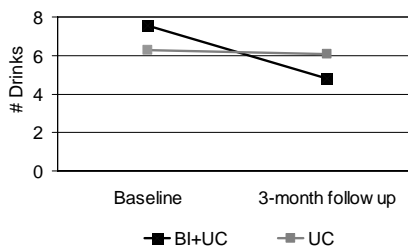
- **Analyses:**
 - One-tailed significance test
 - Repeated measures ANOVA
 - Effect sizes calculated $d = (2t/(\sqrt{df}))$ and $t = (\sqrt{F})$
- **Outcomes:**
 - Heavy Drinking and Consequences
 - Absenteeism/Presenteeism

Getting your Ducks in a Row

Step 5: Piloting / Testing

- **Trained EAP therapists in Motivational Interviewing and the Brief Intervention**
 - Practice role-plays
- **Designed how to administer Screening**
 - Integrated AUDIT-C within existing Health Questionnaire
 - Collaborated with EAP staff
- **Created Baseline and Follow-up Assessments**

Peak Drinks per Occasion



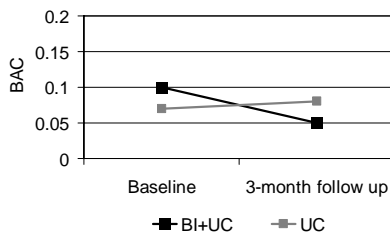
$(F(1, 64) = 3.11, p < .05, d = .44)$

**Getting to the Results:
Sample Characteristics**

Step 6: Analyzing / Reporting

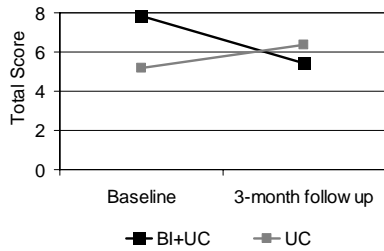
- **30.5% (N=1197) screened for at-risk drinking**
- **Most identified with other presenting concerns (e.g., Relationship (28.4%), stress/anxiety (12.1%), addictive behaviors (17.6%), mood (13.5%))**
- **107 at baseline, 74 (69%) at 3-month follow-up**
 - 69% female; 75.0% Caucasian
 - 37 years ($SD = 12.6$) old
- **About 52% of the sample was self-referred**

Peak BAC



$(F(1, 62) = 3.80, p < .05, d = .50)$

Alcohol Consequences

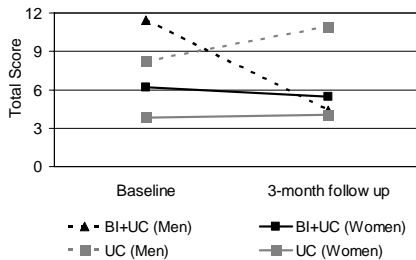


$(F(1, 62) = 5.27, p < .05, d = .58)$

Conclusions from Our Evaluation

- At-risk drinking is very prevalent in the EAP (30%)
 - Employees that would have been undetected
- An evidence-based BI can improve client outcomes and prevent costly problems in the future.
- Preliminary evidence that the BI had an effect on workplace productivity.
- The EAP can have a significant impact in reducing at-risk drinking nationally.

Alcohol Consequences by Gender

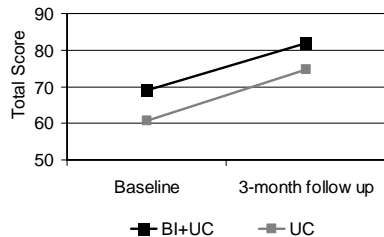


$(F(1, 67) = 3.85, p < .05, d = .48)$

Outcomes Evaluations are Useful

- Outcomes Evaluations:
 - Often starts with existing data analyses that can mature into a larger study to improve services for clients
 - Documents treatment efficacy
 - Provides a strategic advantage of cutting edge and empirically based services
 - Delivering “best practices”
 - Translates outcomes into costs savings
- Collaborate with institutions to do objective evaluations

Presenteeism



$(F(1, 52) = 8.55, p < .05, d = .81)$

Acknowledgements

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