



# Key Findings: *Teachable Moment* Study in U.S. Trauma Center

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#### **Overview**

- Robert Wood Johnson funded
- Randomized clinical trial
  - Enrolled patients from January 5, 2009- June 30, 2011
- Main aims of study:

(a) comparing the effectiveness of two new, shorter screening tools for risky drinking patterns with the longer screening tool in current use

(b) assessing the outcomes of two different brief counseling interventions (BIs) with trauma patients screened to have risky drinking behaviors

# Quantity Frequency Intervention NIAAA model

Tips for Cutting Down on Drinking

U.S. Department of Health and Human Services National Institutes of Health National Institute on Alcohol Abuse and Alcoholism Males, up to age 65:

- No more than 4 in one day AND
- No more than 14 in one week

Females, and men over age 65:

- No more than 3 in one day AND
- No more than 7 in one week

#### **Qualitative Intervention**

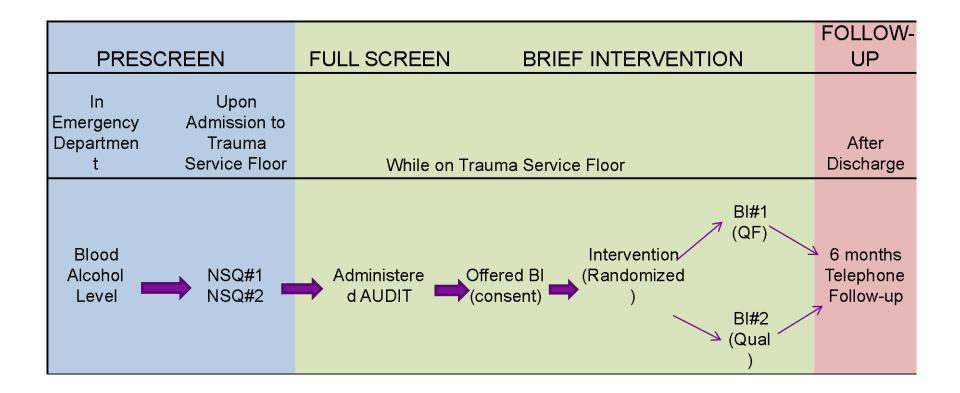
- Targets subjective drunkenness
- Explores factors leading to drunkenness and alternative coping strategies for healthier function
- "Tell me more about getting drunk/overdoing it"
- "Let's talk about what you're getting out of getting drunk/overdoing it..."
- "Tell me how it helps you cope, relax, unwind, etc..."



Counselor

Patient AUDIT score: 26

# **Research Design**



# **Participant Characteristics**

- Overall: N=333
- Enrolled Jan.5, 2009-June 30, 2011
- Quantity/Frequency BI Group: N=167
- Qualitative BI Group: N=166
- Average length of BI: 29.4 minutes (No difference b/n PhD counselors & interns)

# **Baseline Participant Characteristics**

	Overall N=333	Quantity/Frequency Group N=167	Qualitative Group N=166	p-value
<b>Gender</b>	N=333	N=167	N=166	0.690
Male	81.7%	81.8%	82.5%	
Female	18.3%	19.2%	17.5%	
Race	N=333	N=167	N=166	0.065
White	72.7%	74.3%	71.1%	
African-American	21.0%	22.8%	19.3%	
Latino	5.4%	3.0%	7.8%	
American-Indian	0.9%	0.0%	1.8%	
Marital Status	N=333	N=167	N=166	0.154
Single	53.8%	57.5%	50.0%	
Married	25.2%	22.8%	27.7%	
Divorced	111%	13.2%	9.0%	
Separated	0.6%	0.0%	1.2%	
Widowed	2.7%	2.4%	3.0%	
Unknown	6.6%	4.2%	9.0%	
Age	37.0 (12.6)	37.0 (12.8)	37.1 (12.4)	0.907

		Quantity Frequency	Qualitative	0.907
	N=333	N=167	N=166	
	37.0 (0.69)	37.0 (0.99)	37.1 (0.97)	
Nursing Question 1	N=322	N=161	N=161	
Positive	59.9%	57.8%	62.1%	0.426
Mean	5.8 (0.21)	5.3 (0.24)	6.4 (0.35)	<mark>0.012</mark>
Nursing Question 2	N=321	N=163	N=158	
Positive	72.3%	72.4%	72.2%	0.962
Mean	1.9 (0.11)	1.8 (0.16)	2.0 (0.17)	0.354
Audit	N=333	N=167	N=166	
Positive	88.3%	90.4%	86.1%	0.225
Mean 📃	15.3 (0.45)	14.7 (0.61)	15.7 (0.66)	0.299
BAL	N=333	N=167	N=166	
Positive	59.5%	59.3%	59.6%	0.947
Mean	133.8 (5.9)	128.4 (8.2)	139.3 (8.5)	0.357
Injury Type	N=331	N=166	N=165	
Blunt	82.8%	81.3%	84.2%	0.511
Penetrating	16.9%	18.1%	15.8%	
Burn	0.3%	0.6%	0.0%	
Hospitalization Result	N=330	N=167	N=163	
of Drinking (self-report)	40.3%	41.3%	39.3%	0.704
Positive Drug Screen	N=228	N=111	N=117	
	70.6%	71.2%	70.1%	0.857
Typical # Drinks in	N=332	N=166	N=166	
Typical Day	7.1 (0.29)	6.8 (0.40)	7.5 (0.41)	0.225
# Drinks Can Hold	N=321	N=159	N=162	
	12.2 (0.52)	11.6 (0.65)	12.8 (0.80)	0.239

#### Follow-up

- Six months post intervention
- Telephone call
- Self-report with 182 participants (54.7%)
  - 59.8% Quantity Frequency BI Group
  - 53.5% Qualitative BI Group
- No difference between intervention groups in follow-up rates

	Q/F	Qualitative	p-value	
Baseline among those with follow-up data				
Typical # Drinks	N=97	N=84		
Positive	67.0%	69.4%	0.729	
Mean 🗖	6.8 (4.9)	7.4 (5.2)	0.431	
# Drinks Hold	N=85	N=74		
Mean	10.5 (5.8)	13.5 (11.5)	0.046	
AUDIT	N=97	N=84		
Positive	90.7%	86.9%	0.414	
Mean 🗧	14.8 (7.8)	15.2 (7.9)		
6 month follow-up among those with baseline data				
Typical # Drinks	N=97	N=84		
Positive	19.6%	21.4%	0.759	
Mean	2.8 (3.4)	2.7 (2.9)	0.841	
# Drinks Hold	N=85	N=74		
Mean	6.5 (6.3)	6.6 (6.4)	0.928	
# Days Drunk	N=97	N=85		
Positive	5.2%	12.9%	0.064	
Mean	0.2 (0.9)	0.4 (1.5)	0.232	
AUDIT	N=97	N=84		
Positive	32.0%	23.8%	0.224	
Mean	5.3 (6.8)	4.7 (5.8)	0.523	

# **Major Findings**

- No statistical difference for outcomes between patients randomized to Q/F v. Qual BI in typical # of drinks or AUDIT scores.
- Other studies with similar findings supported experimental arm as efficacious as national model – QF/NIAAA.

#### • Overall change in 6 month rates:

Typical # Drinks Recovery (+ to -) Mean Change	N=97, QF 73.8% -4.0 (5.1)	N=84,QUAL 75.9% -4.7 (5.9)	0.797 0.394
AUDIT Recovery (+ to -) Mean Change	N=97, QF 58.7% -9.5 (8.6)	N=84, QUAL 63.1% -10.5 (9.7)	0.464
Baseline AUDIT scores Means are RISKY*	14.8	15.2	
Follow-up AUDIT scores Means are LOW-RISK*	5.3	4.7	

\*Risk status according to World Health Organization AUDIT manual (Babor et al., 2001): <8 Low-risk, 8-15 Risky Drinker, 16+ Further Assessment Recommended

# **Other Follow-up Findings**

6 Month Outcome	Q/F	Qualitative	p-value
Injury requiring medical treatment	1	3	N/A
	other serious	1 auto,1 gun, 1 other	
Successful at making changes	N=97	N=84	
Little or no change (1)	7.2%	7.1%	
Some change (2)	7.2%	9.4%	
Moderate change (3)	16.5%	14.1%	
Many changes (4)	19.6%	34.2%	
Totally quit/ major change (5)	49.5%	35.3%	
Mean score	4.0 (CI 95%: 3.71 to 4.23)	3.8 (CI 95%: 3.54 to 4.08)	0.393
Quality of Life 1=terrible;	N=97	N=84	
10=extremely well	6.9 (CI 95%: 6.37 to 7.42)	7.0 (CI 95%: 6.44 to 7.54)	0.812

# Implications

- Further investigation into alternative brief intervention models is indicated
- Data suggests efficacy of qualitative brief intervention, further research is warranted
- Basic counseling skills
  - Reflection of content
  - Reflection of feeling
  - Reflection of meaning
  - Scaling questions

 Effective in an
intensive inpatient hospital setting

 Data suggests no difference between PhD level Counselors and masters-level counseling trainees
→ EFFICIENCY and COST SAVINGS!

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### **Questions/Comments**

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