

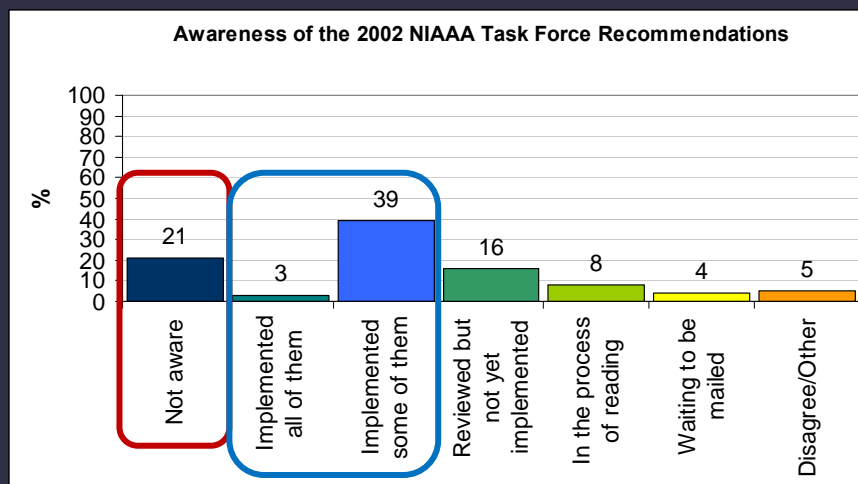
Individual-Focused College Student Drinking Prevention: Revisiting the 2002 NIAAA Task Force Report



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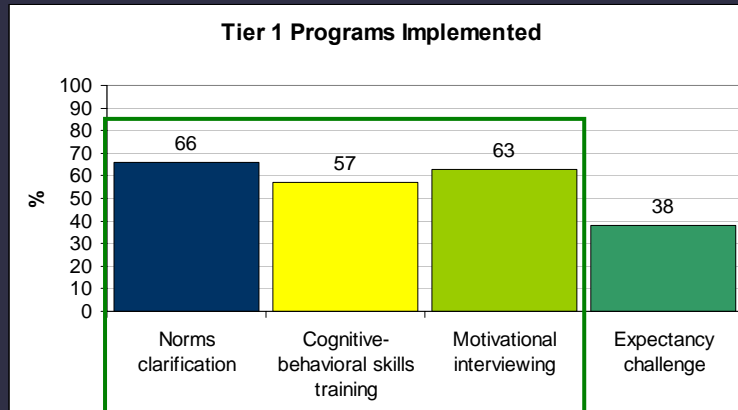
Campus reactions to the 2002 NIAAA Task Force report



Source: Nelson et al. (2010)

Campus reactions to the 2002 NIAAA Task Force report

76% of colleges surveyed offered 1 or more Tier 1 program

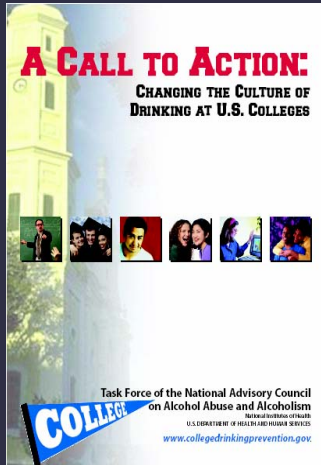


Source: Nelson et al. (2010)

Plenary Goals

- Increase awareness of the NIAAA College Drinking Task Force's tier system of efficacy & recommended strategies
- Review the body of evidence that supported the Task Force recommendations
- Enhance understanding of commonalities and differences among recommended "Tier 1" programs
- □ **Share "hot off the presses" evidence that updates the Task Force report, including new programs**
- Summarize key "take home" messages
- Leave 5-10 minutes for Q&A

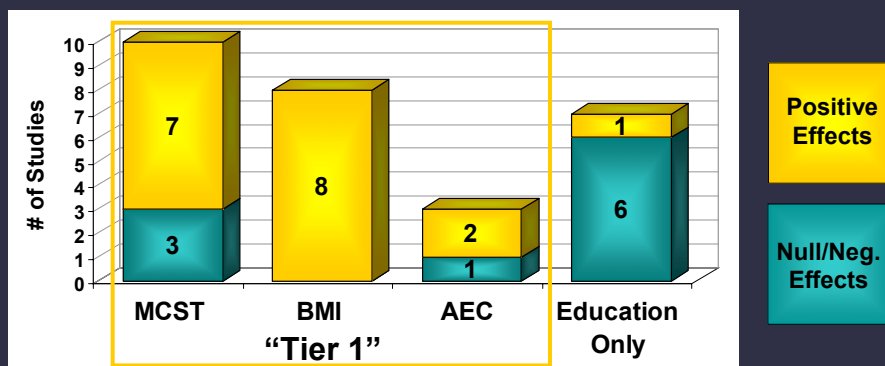
NIAAA Task Force Tier System



www.CollegeDrinkingPrevention.gov

- Tier 1: Evidence of *effectiveness among college students* (≥ 2 studies supporting efficacy)
- Tier 2: Evidence of success with *other populations* that could be applied to college environments
- Tier 3: Evidence of *logical and theoretical promise*, but require more comprehensive evaluation
- Tier 4: Evidence of *ineffectiveness*

Evidence considered in the NIAAA Task Force Recommendations



MCST: Combining cognitive-behavioral skills with norms clarification and motivational enhancement; a.k.a., multi-component skills training

BMI: Brief motivational enhancement interventions

AEC: Alcohol expectancy challenge

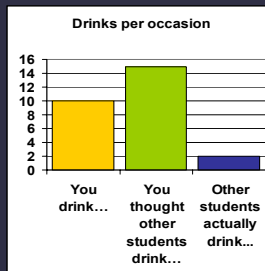
What's COMMON to Tier 1 Strategies?

1. Teach moderate-drinking & life management skills
2. Alcohol education to support skill-use
3. Enhance motivation for change
5. Challenge positive alcohol expectancies



1 container \neq 1 drink

4. Correct misperceived drinking norms



Alcohol does **NOT** make you "Dancing with the Stars" material.

What DIFFERENTIATES Tier 1 strategies?

	Focus	# of Sessions	Structure	Guided by
MCST	Building/strengthening safer-drinking skills	4 to 6+	In-person Group	Manual / agenda
BMI	Increasing awareness & motivation for change	1 or 2	In-person Individual (or Group)*	Personalized feedback*
AEC	Challenging positive expectancies	1	In-person Group	Alcohol administration

Brief Alcohol Screening and Intervention for College Students

A Harm Reduction Approach

Linda A. Dimeff
John S. Baer
Daniel R. Kivlahan
G. Alan Marlatt

Personalized feedback is a cornerstone of the BASICS program, the most well-evaluated BMI.

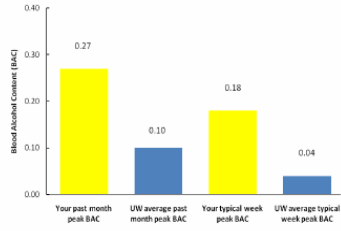
Delivered as a stand-alone print or electronic intervention:

PFI = personalized feedback intervention

PNF = personalized normative feedback

MORE ON YOUR B.A.C.

Using the information you provided, here are the values for your past month peak BAC and your typical week peak BAC compared to the average typical and average peak for other UW students.



.40 - Coma, respiratory arrest
 .30 - Loss of consciousness and risk of death

PFI & PNF

STANDARD DRINK CHART - What they are really drinking!

PERSON ONE: Two 16 oz. red cups full of cranberry juice and vodka = 4 standard drinks. Each drink has 4 ounces of vodka, 10 ounces of cranberry juice, and ice in the rest of the cup. Every 1 1/2 oz. of vodka (40% alcohol by volume) is a standard drink.

PERSON TWO: Two cans of Sparks = 3.8 standard drinks. Sparks comes in 16 oz. cans, and it is 6% alcohol by volume. Every 8.3 ounces counts as one drink.

PERSON THREE: Two "forties" (40 oz. bottles) of Mickey's = 9.0 standard drinks. Mickey's is less potent than some other malt liquors, but it's still strong. It's 5.6% alcohol by volume, meaning every 9 ounces is a standard drink.

PERSON FOUR: Two bottles of Coors Light = 2.0 standard drinks. Every 12 oz. of this 4.2% alcohol by volume beer is a drink.

PERSON FIVE: Two bottles of Mike's Hard Lemonade = 2.3 standard drinks. Mike's comes in 11.2 oz. bottles and is 5.2% alcohol by volume. Every 9.6 ounces is a standard drink.

PERSON SIX: Two Long Island Iced Teas in a 12 oz. glass = 11.4 standard drinks. These have five different types of alcohol. In a 12 oz. glass, you could expect 1 1/4 oz. each of vodka, tequila, rum, gin (all 40% alcohol by volume), 1 1/2 oz. triple sec (50% alc. by volume), about 2 oz. sweet and sour mix, soda, and ice.

PERSON SEVEN: Two shots of Smirnoff Vodka = 2.4 standard drinks. Her shot glass is 1.5 ounces, and she had two shots for a total of 3.0 ounces. Smirnoff is 40% alcohol by volume.

A pretty different night is in store for each of them!

Click Next to learn more about what a standard drink is and how to compute a standard drink.

Does alcohol really affect men and women differently?

BAC is affected by more than just how much we weigh. If a man and woman weigh the same amount over the same amount of time, she will get a higher blood alcohol level. Find out why, please click on the sign.

[<LINK TO SEX DIFFERENCE ADDENDUM>](#)



SEX DIFFERENCE ADDENDUM APPEARS HERE IN ONLINE FEEDBACK IF LINKED FOR IN-PERSON INTERVENTION, HANDOUT IS OFFERED HERE

BMI > PFI > PNF




Tips and Strategies


If you choose to drink alcohol, please consider using these tips **BEFORE DRINKING** to reduce risks and to make your experience more enjoyable.

BEFORE DRINKING



EAT BEFORE YOU DRINK: Food slows the absorption of alcohol, so eating before drinking and when drinking will result in a lower, delayed blood alcohol content (BAC) peak (the point of greatest intoxication). Consider eating slow-digesting foods before you drink alcohol. Complex carbohydrates and high protein foods are good choices; pasta, rice, potatoes, steak, chicken, etc. Worried about calories? Food is more nutritious than alcohol (empty calories), and you'll likely get fewer calories from what you eat than from what you drink. Consider that the average beer has about 150 calories – the equivalent of a hot dog.



SET A LIMIT. Set a reasonable limit for how much you want to drink and stick to it. Consider remaining below a .06 BAC to enhance your enjoyment and reduce your risks. (to print a tailored BAC chart for a person of your weight and sex, go to www.depts.washington.edu/mcsurvey/bal/index.php).



Examples of Web-based PFI →

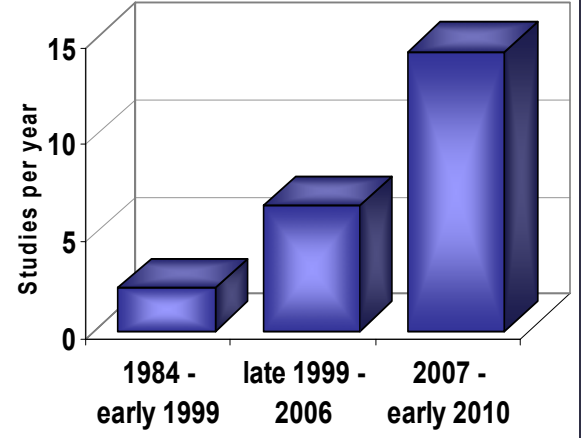



Exponential growth in alcohol prevention RCTs

Larimer & Cronce (2002): 32 studies

Larimer & Cronce (2007): 42 studies

Cronce & Larimer (2011)*: 36 studies



Time Period	Studies per year
1984 - early 1999	3
late 1999 - 2006	7
2007 - early 2010	15

*Alcohol Research & Health, 34(2), 210-221.
<http://pubs.niaaa.nih.gov/publications/arh342/210-221.pdf>

Summarizing the Evidence



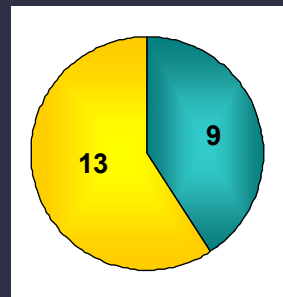
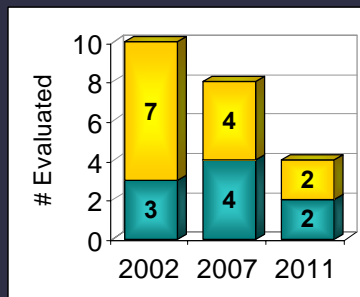
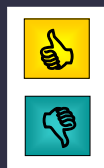
“Thumbs up” =

Reduced drinking and/or related consequences; OR protective effect

“Thumbs down” =

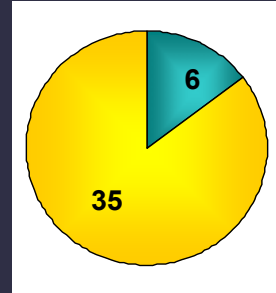
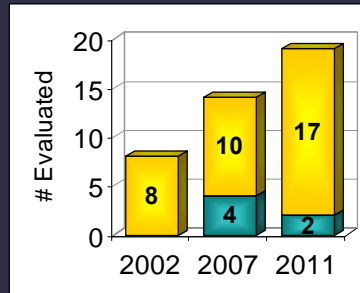
Intervention no different than assessment alone; OR *increased* drinking

MCST (CBT skills, Norms Clarification & MET) 1984-2010



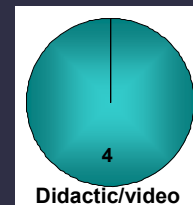
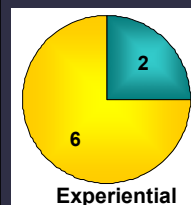
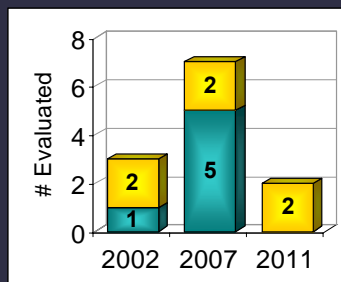
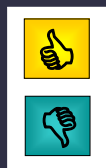
- Apparent trend toward fewer studies evaluating MCST, perhaps due to increased resource/participant burden relative to BMI
- Parent-based intervention (PBI) facilitating communication around alcohol use combined with BMI for students is more effective than BMI alone in preventing negative consequences

In-person BMI (most with PFI/PNF) 1984-2010



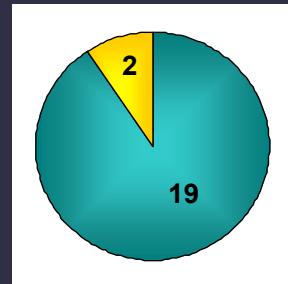
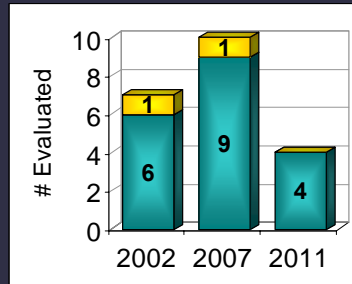
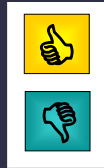
- Effects on negative consequences may persist up to 4 years (BASICS)
- Potential delayed effects on negative consequences
- BMI-alone and MCST-alone are equivalent on most outcomes, but BMI may be superior to MCST for some outcomes (3 studies: negative consequences; high-risk drinking; weekend/weekday quantity)

AEC interventions 1984-2010



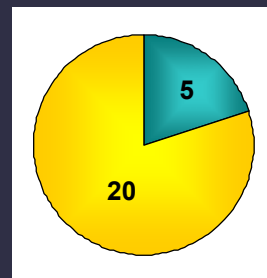
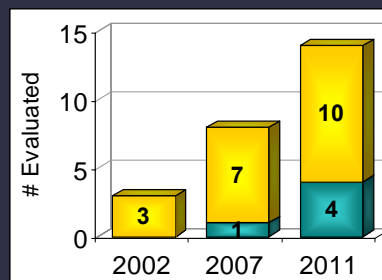
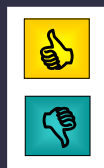
- Experiential AEC shown to be effective with men.
 - Mixed findings for women, with some evidence of positive effects when gender-specific expectancies are challenged in single-gender groups.
- Didactic and video AEC generally not effective

Education/Awareness ONLY 1984-2010



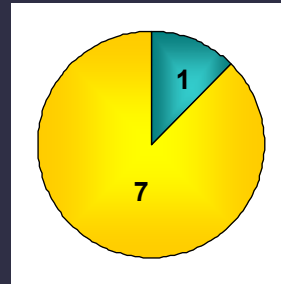
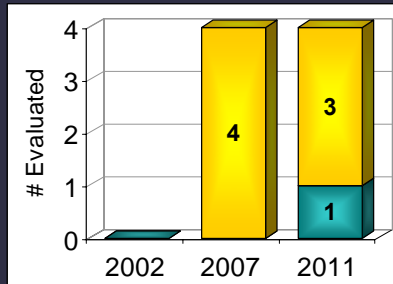
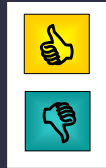
- Education/awareness only continues to be ineffective in changing drinking outcomes other than alcohol knowledge
- Many studies included an education condition as comparison group
- Only 1 new study since 2007 that evaluated education-only

Stand-alone computerized or mailed PFI (*most with PNF*) 1984-2010



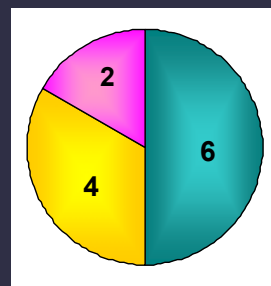
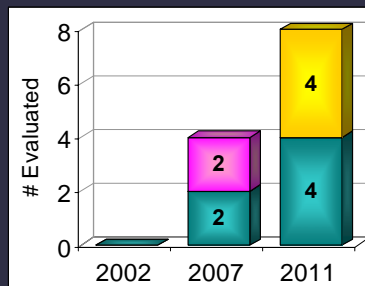
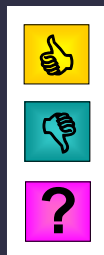
- Few studies compare BMI w/ PFI to PFI-alone (only 6 since 1999)
- BMI w/ PFI and PFI-alone comparable on most outcomes
- 2 found in-person BMI w/ PFI to be more efficacious than stand-alone PFI on at least some outcomes (e.g., drinking/consequences composite)
- Total includes 3 evaluations of e-Check Up to Go (e-CHUG) with positive results (decreased drinking [3] & consequences [1])

Stand-alone PNF (incl. ESP) 1999-2010



- Changes in norms mediated effects on drinking outcomes
- Level of specificity with respect to reference group may influence outcomes (e.g., 1 study found gender-specific PNF more effective than gender-neutral PNF)
- Findings for event specific prevention (ESP) related to 21st birthday drinking outcomes are mixed.

Multi-component education-focused programs 1999-2010



- Programs that have historically been education-only, or predominant education component, but include some elements found in BMI / PFI / PNF.
- Efficacy may be version specific, and conclusions should NOT be generalized.
- **MCEFPs include: Alcohol 101 (-2, ~2), Alcohol 101 Plus (-1, +1), College Alc (+1), MyStudentBody.com (+1), AlcoholEdu for Sanctions (+1), AlcoholEdu for College (3...)**

AlcoholEdu for College RCTs (in Cronce & Larimer, 2011)

Hustad et al., 2010 (version 9.0 [per Wyatt, DeJong & Dixon, in press]; only included 18+)



- Decreased alcohol consumption (or smaller increases in alcohol consumption) **equal to** e-CHUG and **>** assessment only (AO).
- Decreased negative consequences **>** AO and *no different than* e-CHUG, although decreases in e-CHUG were *statistically ns*.

Lovecchio et al., 2010 (version 8.0; only included 18+)



- Smaller increases in alcohol consumption **>** AO .
- Decreased negative consequences & positive alcohol expectancies **>** AO.
- No differences on high-risk or protective alcohol behaviors.
- **Decreases** in responsible drinking behaviors.

Croom et al., 2009 (2004, 2006 or 2007 version?; included 17+)



- Both groups increased alcohol consumption, consequences, and other alcohol-related risk behaviors, with no significant differences between groups.
- *Exception*: Smaller % played drinking games, but **larger** % failed to use safe sex practices.

Other studies of AlcoholEdu:

Wall, 2007 (2003 version?; ages?)



- Did not randomly assign individuals (or groups) to intervention or control.
- “Randomization” was *post hoc*, comparing “control participants” pre-test scores to “intervention participants” post-test scores, which doesn’t control for the effect of assessment reactivity.
- Extremely OVER powered (N = 20,150), so differences questionable.
- Immediate post-test only with no follow-up.

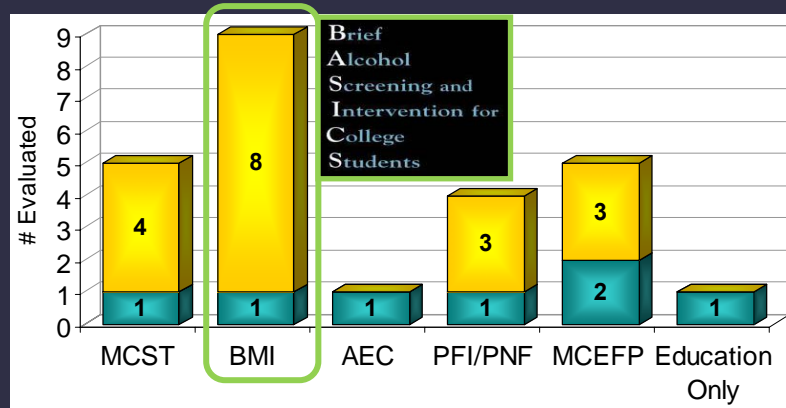
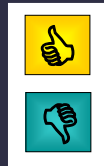
Paschall et al., 2011 (version not specified; only included 18+)



- Random assignment at the level of the university.
- New cross-sectional random sample (N=200) of students each quarter; 44%-49% survey response rate.
- Wide range of intervention completion rate: 4%-100%.
- Decreased frequency of alcohol use and binge drinking relative to control at immediate post-assessment (Fall).
- No effect evident in Spring, even among schools with high intervention completion rates.
- Did not examine alcohol-related consequences.

Wyatt, DeJong & Dixon, in press – Time series analysis (not RCT)

Special Populations: Mandated Students 1984-2010



Pros/cons of different prevention programs

	MCST (e.g., ASTP)	BMI (e.g., BASICS)	PFI / PNF (e.g., e-CHUG)	Experiential AEC	AlcoholEdu	Other MCEFP (e.g., CollegeAlc)
Development/ Training Cost	\$	\$\$	*\$ - \$\$	-	-	-
Implementation Cost	\$\$	\$\$	*\$ - \$\$	\$\$\$	\$\$\$\$	\$\$ - \$\$\$\$
Human Resources	1-2 people	1-2 people	-	1-2 people	-	-
Specialized Training Req.	Yes	Yes	No	Yes	No	No
Specialized Resources Req.	No	No	No	Yes	Yes	Yes
Reach	Groups (8-12 students)	Individual students	All students	Groups (8-12 students)	All students	All students
Range of Effect Sizes**	$d = 0.13-0.26$ (w/ BMI)	$d = 0.21-1.06$	$d = 0.29-0.85$	$d = 0.00-0.36$	$d = 0.56-0.75$	$d = 0.15-0.38$
Length of Effects on Drinking	Up to 1 year	Up to 4 years	Up to 1 year	Up to 3 months	Up to 1 month	Variable (short- term)

* FREE PFI: Check Your Drinking beta version: <http://notes.camh.net/efeed.nsf/newform>

Doumas & Hannah, 2008; Doumas & Haustveit, 2008; Doumas, McKinley & Book, 2009 all found positive effects of this version.

** Based on studies included in Cronce & Larimer, 2011

Conclusions: Looking BACK

- Overwhelming support for BMI and related interventions incorporating Motivational Interviewing style, PFI, PNF, and AEC components
 - Evidence supporting e-CHUG, CheckYourDrinking.net and other electronic personalized feedback programs adds to growing evidence for PFIs.
 - Less consistency on changing consequences than drinking per se
 - Longer follow-ups necessary; in-person BMI associated with emergent effects on consequences
- Emerging evidence in support of one MCEFP—AlcoholEdu for College—but more research is needed (RCTs = 4 vs. 41 BMI, 25 PFI).

Conclusions: Looking FORWARD

- Need more research on BMIs and PFIs targeting multiple risk behaviors & spanning the alcohol/mental health divide
 - Alcohol and marijuana use
 - Alcohol/marijuana use and problematic gambling behavior
 - Depression and alcohol use
- Future RCTs of AlcoholEdu, e-CHUG and other electronic prevention programs would benefit from:
 - Including matriculating freshman <18 years old.
 - Incorporating baseline & post-assessment that is independent of the program.
 - Gauging level of engagement and depth of processing.
 - Including longer, longitudinal follow-up.

Take Home Messages

- Individual-focused programs need to be considered one “piece” of a larger “prevention puzzle.”
- Strategies recommended by the NIAAA Task Force (i.e., MCST, BMI, experiential AEC) continue to produce drinking reductions, but there are other options that current science suggests work (i.e., PFIs, PNF)
- Reach needs to be weighed against strength and duration of effect taking into consideration initial/ongoing costs and resource demands.
 - Some costs can be diffused through collaboration & technology
- The science is constantly evolving, and prevention approaches need to be regularly revisited.

Thank You!

and thank you to...

NIAAA (T32 AA007455)

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