

“Delivery of CBT could be subcontracted to the computer ...”




(Carroll & Rounsaville, 2010)

Technology Assisted Care



Use of technology devices to deliver some aspects of psychotherapy or behavioral treatment directly to patients via interaction with a web-based program

To date, more than **100**
different technology-assisted care
programs have been developed for a
range of mental disorders and
behavioral health problems



More Specifically... there are meta-analytic evaluations of technology assisted care programs for a range of Psychiatric Disorders

- **Depression and Anxiety** (Spek et al., 2007; Andrews et al., 2010)
- **Illicit Drug Use** (Tait, 2013)
- **Smoking** (Rooke, 2010)
- **Alcohol Use** (Khadjesari, 2011)

Technology-Assisted Care Interventions

- **may consist of text, audio, video, animations, and/or other forms of multimedia**
- **use information from medical records, physiological data capture devices, or other sources**
- **may be interactively customized, or tailored, to an individual user's needs**

Telephone



Mobile Phones

Computers



Tablets



Technology-Assisted Care Interventions offer many advantages...



Flexible in their ability to provide tailored information to clients.



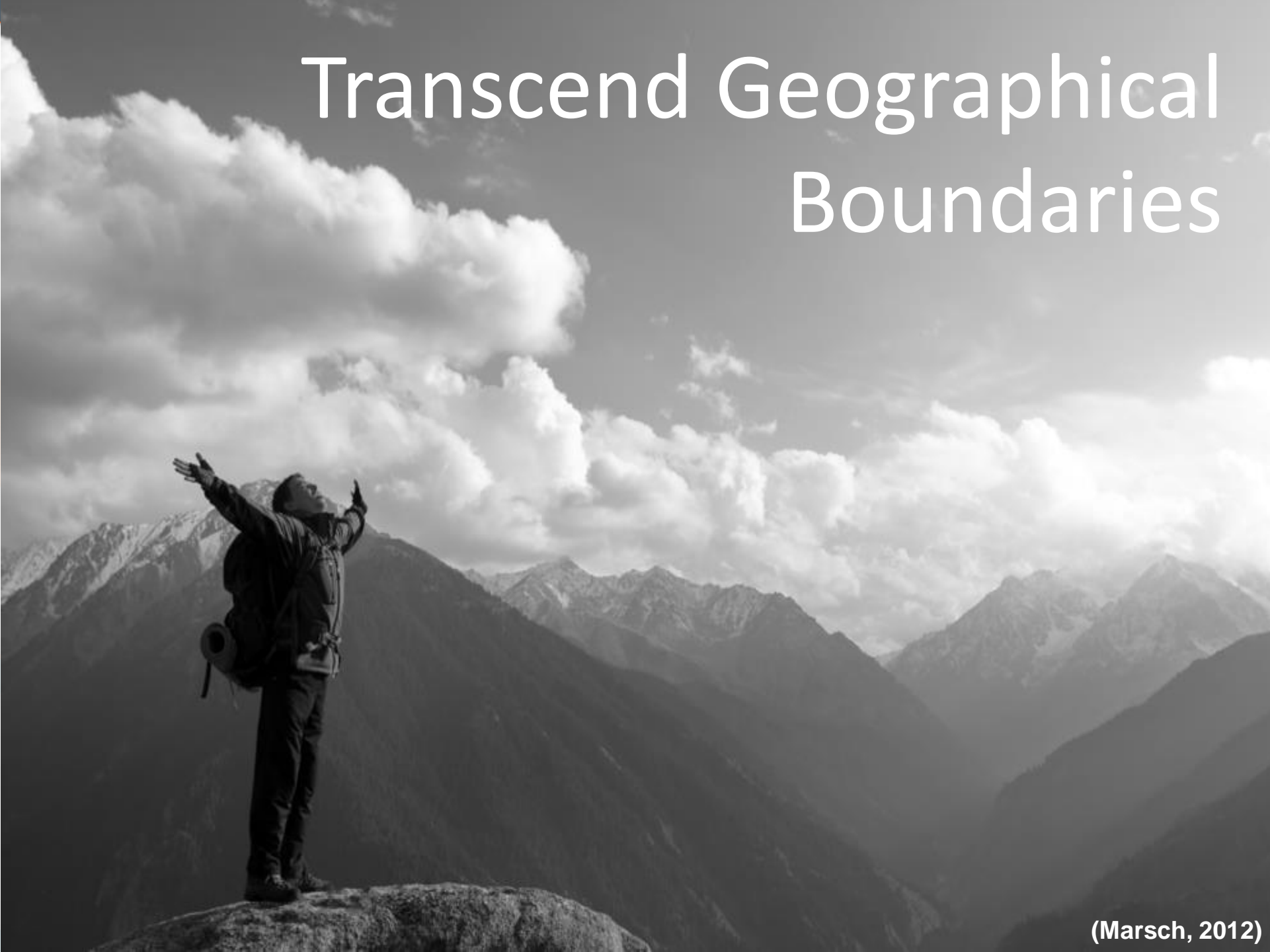
(Moyer & Finney, 2004/2005; Fotheringham et al., 2000)

**Allow for on-demand access to
therapeutic support outside of formal
care settings anytime/anywhere**



(Marsch, 2012)

Transcend Geographical Boundaries



(Marsch, 2012)

Enable anonymity



TAC Interventions could increase **RECEPTIVITY** to care by serving as a proverbial “foot in the door” for clients who are uneasy about seeking SUD treatment.

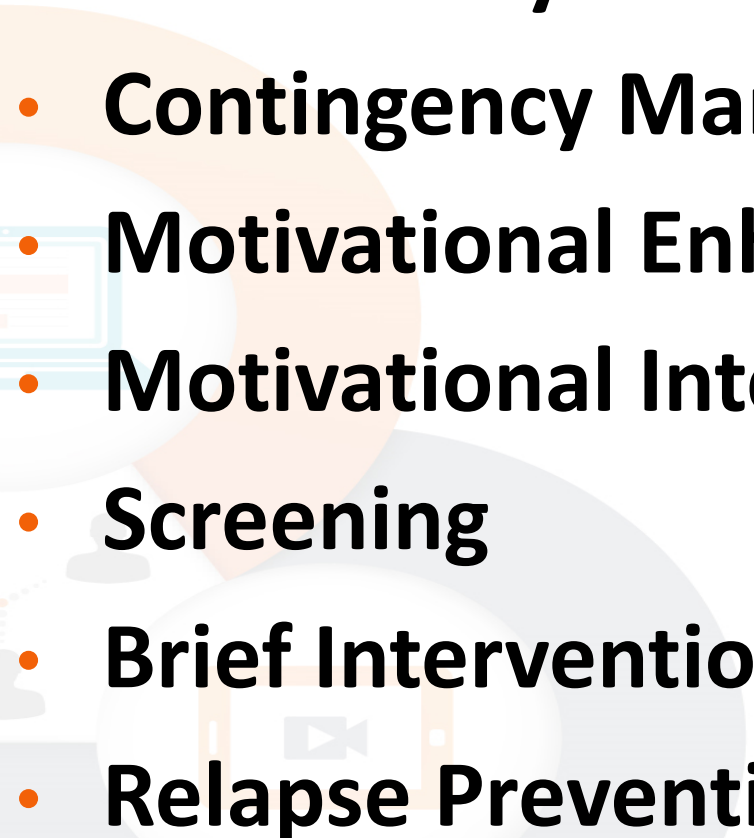


(Rummel & Joyce, 2010)

TAC Interventions can improve
organizational capacity to provide
evidence-based practices and thereby
enhance the **reach** of EBPs

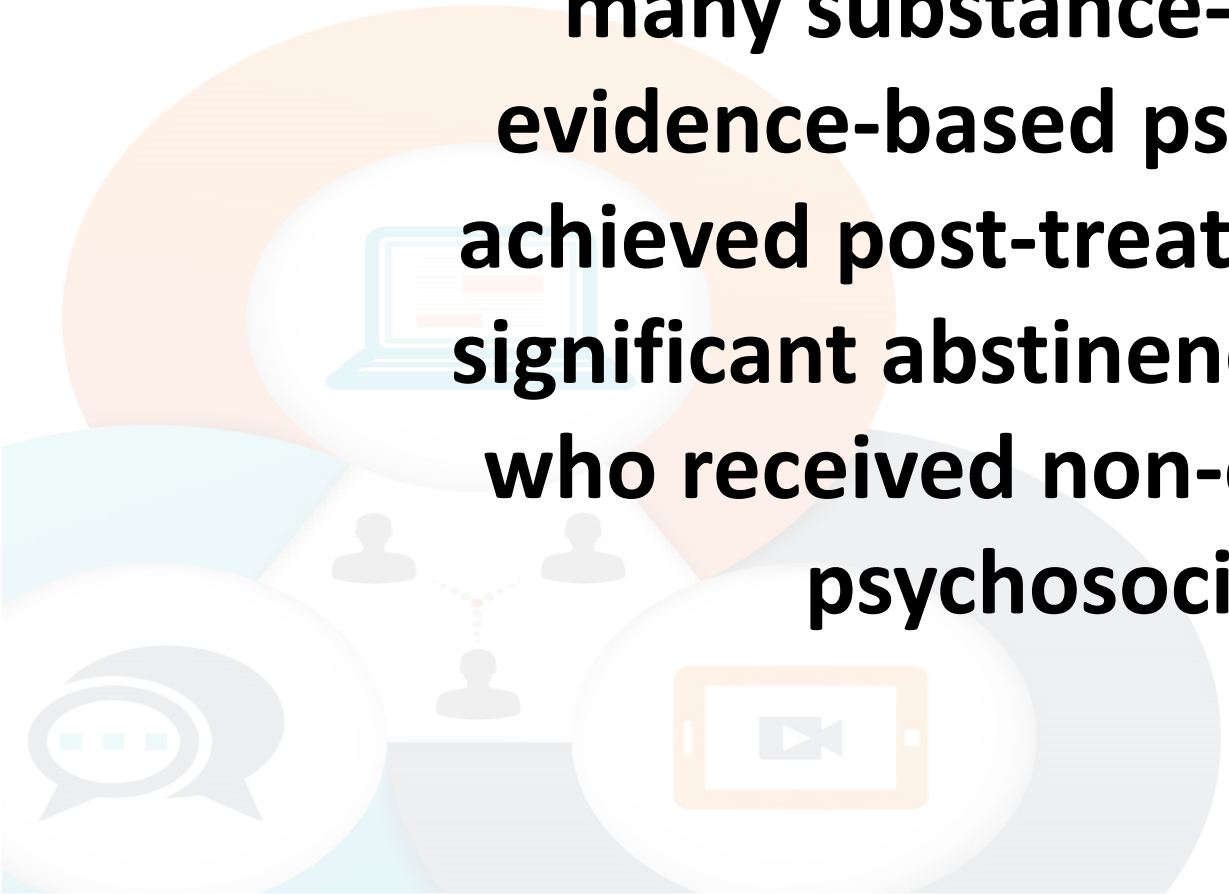


EBPs Administered via Technology-Assisted Care Interventions

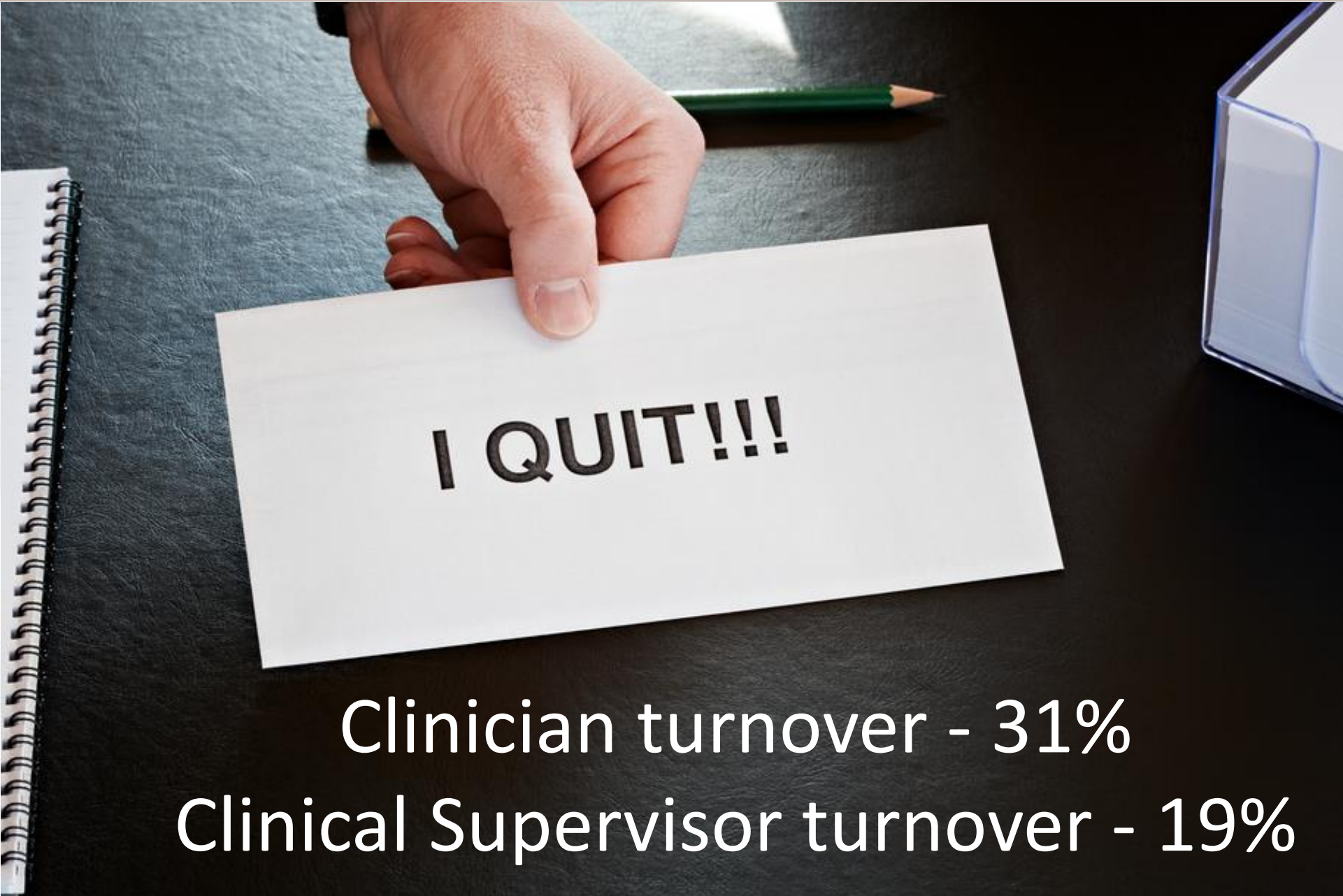
- **Cognitive Behavioral Therapy**
 - **Community Reinforcement Approach**
 - **Contingency Management**
 - **Motivational Enhancement**
 - **Motivational Interviewing**
 - **Screening**
 - **Brief Intervention**
 - **Relapse Prevention**
- 

**Encouraging evidence
suggests positive
treatment outcomes**





A recent meta-analysis (n=2,340) demonstrated that nearly 2.5 times as many substance-users who received evidence-based psychosocial treatment achieved post-treatment and/or clinically significant abstinence, compared to those who received non-evidence-based or no psychosocial treatment.



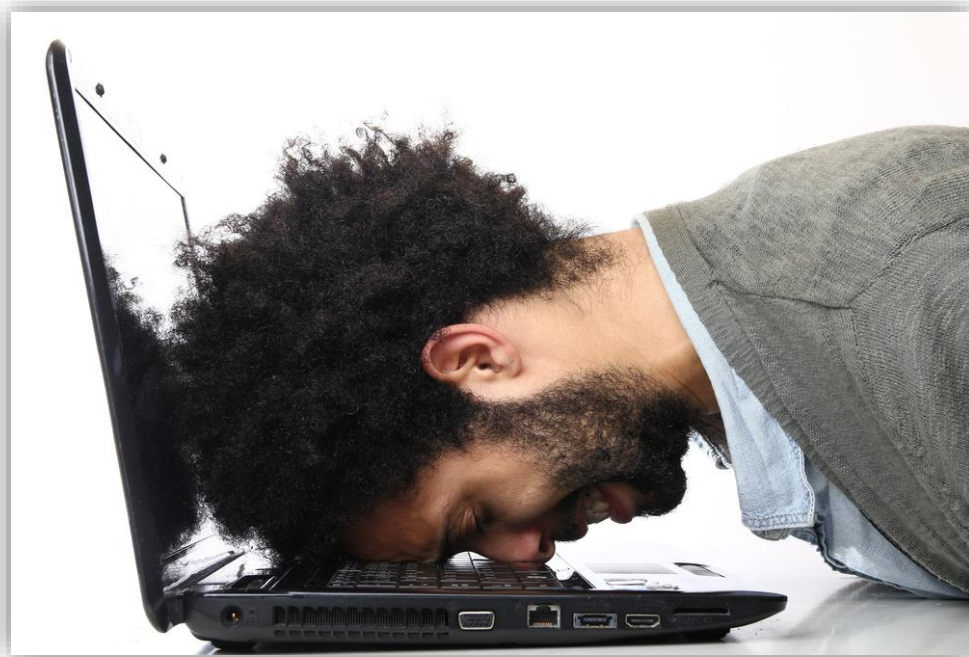
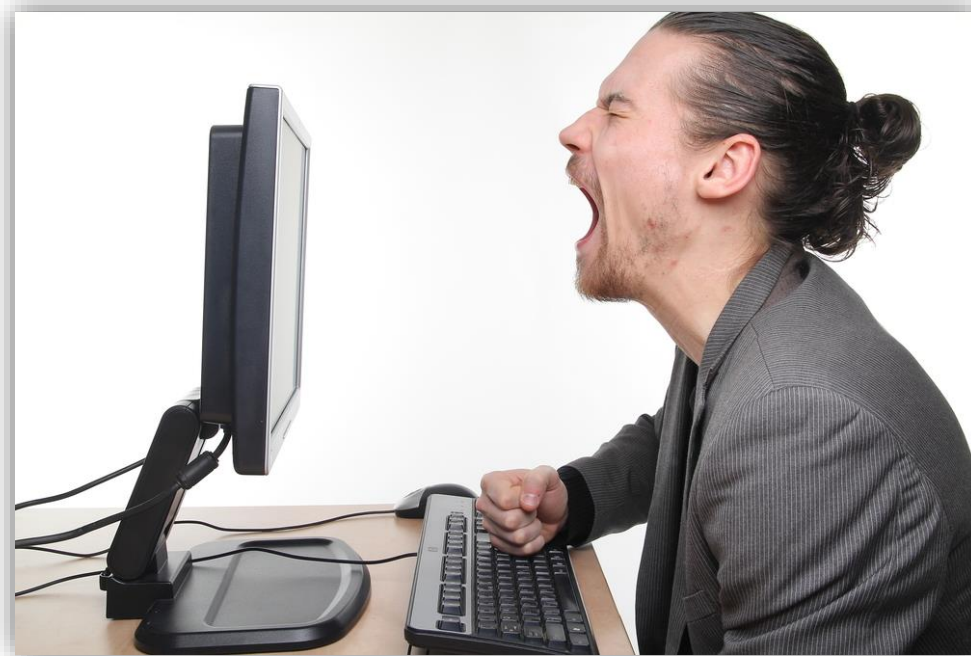
Clinician turnover - 31%
Clinical Supervisor turnover - 19%

In summary, professionals can view technology as a powerful partner



in improving quality and productivity of behavioral healthcare

not THIS ...



... or THIS



But this...

**Clinician
Extenders**

(Bickel et al., 2008; Carroll & Rounsaville, 2010; Des Jarlais et al., 1999; Marsch, 2011)



Technology-Assisted Care for Substance Use Disorders

Module 3

TAC Interventions for SUD





"So this software... Does it tell you to do things?"

Technology-Assisted Care Interventions

**have been developed to target
Addictive Disorders including:**

- **Alcohol Use**
- **Tobacco Cessation**
- **Gambling**
- **Illicit Drug Use**

In general, technology-based behavioral health interventions have been shown to be well accepted, efficacious, and cost effective, especially when compared to standard care.



**Technology-Assisted Care Interventions
have been validated recently through
NIDA research
TES and CBT4CBT**

Therapeutic Education System (TES)

**An interactive, web-based psychosocial
intervention for SUDs, grounded in:**

Community Reinforcement Approach (CRA)



Contingency Management (CM)

What Do People Say About TES?



The image shows a video player interface with a central graphic. The graphic features a play button icon over a cluster of icons representing technology (laptop), communication (speech bubble), and people. Below the graphic, the text reads: "Technology-Based Interventions" in blue, "Enhancing Treatment for Substance Use Disorders" in orange, and "www.sudtech.org" in grey. At the bottom of the video frame, there are logos for ATTC, SAMHSA, NIH National Institute on Drug Abuse, and a "blending initiative" logo. On the right side of the video frame, there are three social media icons: a heart, a clock, and a paper plane. A small icon with four arrows is located in the bottom right corner of the video frame.

Technology-Based Interventions
Enhancing Treatment for Substance Use Disorders
www.sudtech.org

ATTC SAMHSA NIH National Institute on Drug Abuse blending initiative

Features of TES

- Consists of **65** interactive, multimedia modules
- Self-directed, evidence-based program with skills training, interactive exercises, and homework
- Audio component accompanies all module content
- Electronic reports of patient activity available
- Contingency Management Component tracks earnings of incentives dependent on some defined outcome (e.g., urine results confirming abstinence)

TES modules can be broadly classified as:

- ***Substance Use/Abuse***
(e.g., drug refusal skills, coping with thoughts about using, identifying/managing triggers)
- ***Risk Reduction for HIV, AIDS & STIs***
(e.g., drug use, HIV and hepatitis, identifying/managing triggers for risky sexual behaviors)
- ***Cognitive and Emotional Regulation***
(e.g., managing negative thinking, anger management)
- ***Psychosocial Functioning***
(e.g., effective problem solving, communication skills)

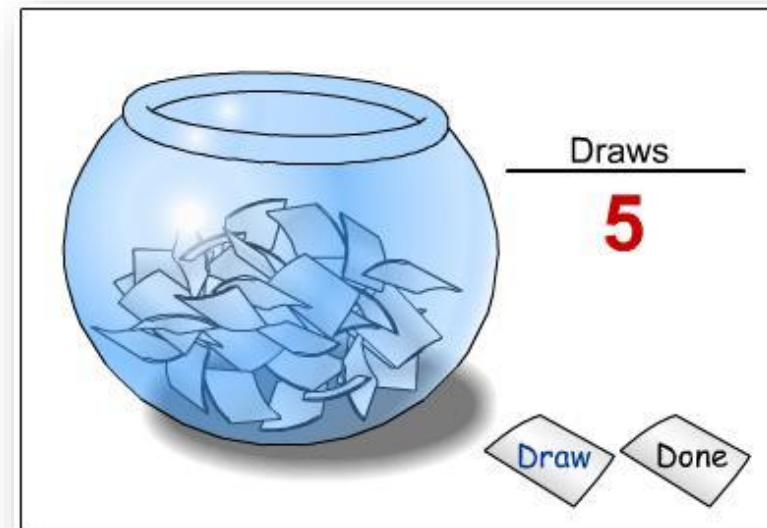
Optional modules provide more advanced information on risk reduction and psychosocial functioning

TES Incentive System

Prize-based incentives, virtual “fishbowl,”
intermittent schedule of reinforcement

Based on:

- **Abstinence**
- **Module Completion**



Primary Objective of CTN-0044: Multi-site Effectiveness Trial of TES

To evaluate the effectiveness of including an interactive, web-based version of the Community Reinforcement Approach (CRA) plus incentives targeting drug abstinence and treatment participation as part of community-based, outpatient substance abuse treatment