--Reviews--


NASADAD. Telehealth in state substance use disorder (SUD) services. National Association of State Alcohol and Drug Abuse Directors, Feb., 2009  [pdf](#)


Substance Abuse and Mental Health Services Administration. Using technology-basedtherapeutic tools in behavioral health services. Treatment Improvement Protocol Series #60. SAMHSA, 2015  [htm](#)


--Demonstrations and Research Studies--


Roget N, Hamblin TK. Telehealth: It’s not about the technology - it’s about expanding access and enhancing care. National Frontier and Rural Addiction Technology Transfer Center Webinar, Presented April 18, 2013 PubMed


Selected Abstracts:


**Internet-delivered treatment for substance abuse: a multisite randomized controlled trial.**

**Abstract**

**Objective:**
Computer-delivered interventions have the potential to improve access to quality addiction treatment care. The objective of this study was to evaluate the effectiveness of the Therapeutic Education System (TES), an Internet-delivered behavioral intervention that includes motivational incentives, as a clinician-extender in the treatment of substance use disorders.

**Method:**
Adult men and women (N=507) entering 10 outpatient addiction treatment programs were randomly assigned to receive 12 weeks of either treatment as usual (N=252) or treatment as usual plus TES, with the intervention substituting for about 2 hours of standard care per week (N=255). TES consists of 62 computerized interactive modules covering skills for achieving and maintaining abstinence, plus prize-based motivational incentives contingent on abstinence and treatment adherence. Treatment as usual consisted of individual and group counseling at the participating programs. The primary outcome measures were abstinence from drugs and heavy drinking (measured by twice-weekly urine drug screens and self-report) and time to dropout from treatment.

**Results:**
Compared with patients in the treatment-as-usual group, those in the TES group had a lower dropout rate (hazard ratio=0.72, 95% CI=0.57, 0.92) and a greater abstinence rate (odds ratio=1.62, 95% CI=1.12, 2.35). This effect was more pronounced among patients who had a positive urine drug or breath alcohol screen at study entry (N=228) (odds ratio=2.18, 95% CI=1.30, 3.68).

**Conclusions:**
Internet-delivered interventions such as TES have the potential to expand access and improve addiction treatment outcomes. Additional research is needed to assess effectiveness in non-specialty clinical settings and to differentiate the effects of the community reinforcement approach and contingency management components of TES.


**Applying technology to the treatment of cannabis use disorder: comparing telephone versus Internet delivery using data from two completed trials.**
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**Abstract**

Technology-based interventions such as those delivered by telephone or online may assist in removing significant barriers to treatment seeking for cannabis use disorder. Little research, however, has addressed differing technology-based treatments regarding their comparative effectiveness, and how user profiles may affect compliance and treatment satisfaction. This study addressed this issue by examining these factors in online (N=225) versus telephone (N=160) delivered interventions for cannabis use, using data obtained from two previously published randomized controlled trials conducted by the current authors. Several differences emerged including stronger treatment effects (medium to large effect sizes in the telephone study versus small effect sizes in the Web study) and lower dropout in the telephone intervention (38% vs. 46%). Additionally, around half of the telephone study participants sought concurrent treatment, compared with 2% of participants in the Web study. Demographics and predictors of treatment engagement, retention and satisfaction also varied between the studies. Findings indicate that both telephone and Web-based treatments can be effective in assisting cannabis users to quit or reduce their use; however, participant characteristics may have important implications for treatment preference and outcome, with those who elect telephone-based treatment experiencing stronger outcomes. Thus, participant preference may shape study populations, adherence, and outcome.
Using technology in the delivery of mental health and substance abuse treatment in rural communities: a review.

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Abstract

Rural communities face tremendous challenges in accessing mental health and substance abuse treatment services. Some of the most promising advancements in the delivery of rural health care services have been in the area of telecommunication technology. These applications have the potential to reduce the disparities in the delivery of substance abuse and mental health services between urban and rural communities. The purpose of this inquiry was to explore the advances and uses of telecommunications technology, and related issues, in the delivery of mental health and substance abuse treatment services within rural areas. A review of the academic literature and other relevant works was conducted and the content was organized into four major themes: (a) advantages of telehealth and applications to rural practice, (b) barriers to implementation in rural practice, (c) utilization in rural areas, and (d) areas for further research.

Development of an in-home telehealth program for outpatient veterans with substance use disorders.

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Abstract

A variety of obstacles (e.g., lack of transportation, less availability of treatment in rural districts) contribute to underutilization of treatment among patients with substance use disorders, warranting the need to develop innovative strategies for enhancing access to treatment for these patients. The telehealth in-home-messaging-device is a small message-delivering and monitoring device connected via landline phone to a secure server that provides assessment and disease self-management education to patients in their homes. We describe the development of a Substance Use Disorder telehealth management program (SUD program) for use on this device and a feasibility pilot of the program with six outpatient veterans with substance use disorders referred by their primary medical care providers. These patients indicated that the SUD program was acceptable, easy to use, and helpful toward addressing their substance use problems. Home telehealth technology may be an innovative and feasible approach for providing substance abuse evidence-based treatment either as an adjunct to specialty treatment for substance use disorders or as a stand-alone intervention within primary care for a larger number of patients who may otherwise not access traditional treatment services.

Telemedicine-based alcohol services for rural offenders.

Staton-Tindall M¹, Wahler E, Webster JM, Godlaski T, Freeman R, Leukefeld C.

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Abstract

Research has consistently shown that alcohol use is a problem in rural communities and access to substance abuse treatment, particularly evidence-based treatment is limited. Because telemedicine has been shown to be effective in delivering services, this article presents a novel and innovative way of using telemedicine technology in the form of videoconferencing to deliver an evidence-based alcohol intervention (motivational enhancement therapy) with at-risk alcohol users in real-world settings (rural probation and parole offices). This article focuses on: (a) creating a profile of an at-risk group of rural alcohol users; (b) describing the evidence-based intervention; and (c) describing the innovative telemedicine-based service delivery approach.

A randomized trial of Web-based videoconferencing for substance abuse counseling.
King VL\textsuperscript{1}, Brooner RK, Peirce JM, Kolodner K, Kidorf MS.
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Abstract

Web-based videoconferencing can improve access to substance abuse treatment by allowing patients to receive counseling services in their homes. This randomized clinical trial evaluates the feasibility and acceptability of Web-based videoconferencing in community opioid treatment program (OTP) participants. Participants that reported computer and Internet access (n=85) were randomly assigned to receive 12 weeks of weekly individual counseling in-person or via eGetgoing, a Web-based videoconferencing platform. Fifty-nine of these participants completed the study (eGetgoing=24; in-person=35), with most study withdrawal occurring among eGetgoing participants. Participants exposed to the study conditions had similar rates of counseling attendance and drug-positive urinalysis results, and reported similar and strong ratings of treatment satisfaction and therapeutic alliance. These results support the feasibility and acceptability of Web-based counseling as a good method to extend access to individual substance abuse counseling when compared to in-person counseling for patients that are able to maintain a computer and Internet connection for reliable communication.

A systematic review of Internet-based therapy for the treatment of addictions.

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Abstract

Traditional therapies for addictions are underutilized and characterized by high attrition rates suggesting they may not meet the needs of a proportion of individuals with addiction-related problems including problem drinking, smoking, substance use and problem gambling. Internet-based therapy has emerged as a new treatment modality for psychological disorders and health issues and this review is the first attempt to summarize and evaluate the evidence of the effectiveness of Internet therapy for addictions. Extensive literature searches were conducted to identify studies meeting the criteria of delivering structured Internet-based treatment programs for addictions that incorporated a component of trained therapist interaction. Only nine studies met criteria for inclusion with seven representing a randomized controlled trial. These included seven papers reporting on tobacco-cessation programs, one Internet-based therapy for pathological gambling, and one treatment program for substance abuse. A range of therapeutic models, treatment components and outcome measures was included across these studies. Positive treatment effects were reported following completion of therapy and at longer-term follow-up. The review concluded that Internet-based therapies for addictions are effective in achieving positive behavioral changes but that more research is required to determine the comparative effectiveness of various Internet-based therapies and their components.


Internet therapy versus internet self-help versus no treatment for problematic alcohol use: A randomized controlled trial.

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Abstract

OBJECTIVE:

Problematic alcohol use is the third leading contributor to the global burden of disease, partly because the majority of problem drinkers are not receiving treatment. Internet-based alcohol interventions attract an otherwise untreated population, but their effectiveness has not yet been established. The current study examined the effectiveness of Internet-based therapy (therapy alcohol online; TAO) and Internet-based self-help (self-help alcohol online; SAO) for problematic alcohol users.

METHOD:

Adult problem drinkers (n = 205; 51% female; mean age = 42 years; mean Alcohol Use Disorders Identification Test score = 20) were randomly assigned to TAO, SAO, or an untreated waiting-list control group (WL). Participants in the TAO arm received 7 individual text-based chat-therapy sessions. The TAO
and SAO interventions were based on cognitive-behavioral therapy and motivational interviewing techniques. Assessments were given at baseline and 3 and 6 months after randomization. Primary outcome measures were alcohol consumption and treatment response. Secondary outcome measures included measures of quality-of-life.

**RESULTS:**
Using generalized estimating equation regression models, intention-to-treat analyses demonstrated significant effects for TAO versus WL (p = .002) and for SAO versus WL (p = .03) on alcohol consumption at 3 months postrandomization. Differences between TAO and SAO were not significant at 3 months postrandomization (p = .11) but were significant at 6 months postrandomization (p = .03), with larger effects obtained for TAO. There was a similar pattern of results for treatment response and quality-of-life outcome measures.

**CONCLUSIONS:**
Results support the effectiveness of cognitive-behavioral therapy/motivational interviewing Internet-based therapy and Internet-based self-help for problematic alcohol users. At 6 months postrandomization, Internet-based therapy led to better results than Internet-based self-help.

The effect of telephonic patient support on treatment for opioid dependence: outcomes at one year follow-up.
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**Abstract**
**OBJECTIVE:**
The present study examined the impact of a telephonic patient support program known as HereToHelp™ (HTH) on compliance and treatment outcomes among opioid dependent (OD) patients new to buprenorphine treatment (BUP).

**METHOD:**
A total of 1426 OD patients new to BUP were randomized to receive BUP alone (standard care) or BUP plus the HTH patient support program. All patients completed the Addiction Severity Index (ASI) at the time of enrollment, and at 12 months post-enrollment.

**RESULTS:**
Subjects randomized to the HTH support program who accepted at least 3 care coach intervention calls were more compliant with BUP than the standard care group at month 12 (64.4% vs. 56.1%, χ(2)=5.09, p<.025). Compared to patients who were non-compliant with BUP, compliant patients reported significantly lower scores on all 7 of the ASI composite scores, indicating lower severity on addiction-related problems.

**CONCLUSIONS:**
The HTH intervention seemed to improve patient treatment outcomes indirectly by improving compliance with BUP. Supplementing BUP with a structured, telephonic compliance-enhancement program is an effective way to improve compliance with medication which then improves patient outcomes.

**J Subst Abuse Treat.** 2009 Apr;36(3):331-8.
Assessing the effectiveness of an Internet-based videoconferencing platform for delivering intensified substance abuse counseling.
King VL1, Stoller KB, Kidorf M, Kindbom K, Hursh S, Brady T, Brooner RK.
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**Abstract**
Enhanced schedules of counseling can improve response to routine opioid-agonist treatment, although it is associated with increased time demands that enhance patient resistance and nonadherence. Internet-based counseling can reduce these concerns by allowing patients to participate from home. This study assesses treatment satisfaction and response to Internet-based (CRC Health Group’s e-Getgoing) group counseling for partial responders to methadone maintenance treatment. Patients testing positive for an illicit substance (n = 37) were randomly assigned to e-Getgoing or onsite group counseling and followed for 6 weeks. Patients in both conditions responded favorably to intensified treatment by achieving at least
2 consecutive weeks of abstinence and 100% attendance to return to less-intensive care (e-Getgoing: 70% vs. routine: 71%, ns). Treatment satisfaction was good and comparable across conditions. E-Getgoing patients expressed a preference for the Internet-based service, reporting convenience and increased confidentiality as major reasons. Integrating Internet-based group counseling with on-site treatment services could help expand the continuum of care in methadone maintenance clinics.


Telehealth service delivery for persons with alcoholism.
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Abstract
Videoconferencing at a bandwidth of 384 kbit/s was used in open sessions for subjects with alcohol use disorders (AUD). Study participants received eight sessions of group therapy over a four-week period from an accredited addictions counsellor. Outcome assessment included self-report measures, a qualitative interview and a chart review. Of the 18 subjects who started the study, 14 attended at least four sessions of therapy, completed self-report assessments and the thematic interview. The participants reported high levels of satisfaction with telepsychiatry, found the intervention to be highly credible, had good session attendance and attrition comparable to that expected with conventional same-room treatment. In all, 82% of subjects reported that they would recommend the service to a friend or family member. The results demonstrate the feasibility of using videoconferencing for service delivery to adults with AUD, and encourage the future performance of randomized controlled trials.


Mechanisms of change associated with technology-based interventions for substance use.
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Abstract
Background:
Technology-based interventions (TBIs) for substance use disorders have been increasing steadily. The mechanisms by which TBIs produce change in substance use outcomes have not been reviewed. This article is the first review of the conceptual and empirical underpinnings of the mechanisms associated with TBIs for substance use disorders.

Methods:
We review the literature on potential mechanisms associated with TBIs targeting tobacco, alcohol, and poly-substance use. We did not identify TBIs targeting other drug classes and that assessed mechanisms.

Results:
Research suggests that TBIs impact outcomes via similar potential mechanisms as in non-TBIs (e.g., in-person treatment), with the exception of substance use outcomes being associated with changes in the quality of coping skills. The most frequent potential mechanisms detected were self-efficacy for tobacco abstinence and perceived peer drinking for alcohol abstinence.

Conclusions:
Research on mechanisms associated with TBIs is still in a nascent stage. We provide several recommendations for future work, including broadening the range of mechanisms assessed and increasing the frequency of assessment to detect temporal relations between mechanisms and outcomes. We also discuss unique challenges and opportunities afforded by technology that can advance theory, method, and clinical practice.

J Behav Health Serv Res. 2014 Sep 6. [Epub ahead of print]

Paving the Way to Successful Implementation: Identifying Key Barriers to Use of Technology-Based Therapeutic Tools for Behavioral Health Care.
Ramsey A1, Lord S, Torrey J, Marsch L, Lardiere M.
Abstract
This study aimed to identify barriers to use of technology for behavioral health care from the perspective of care decision makers at community behavioral health organizations. As part of a larger survey of technology readiness, 260 care decision makers completed an open-ended question about perceived barriers to use of technology. Using the Consolidated Framework for Implementation Research (CFIR), qualitative analyses yielded barrier themes related to characteristics of technology (e.g., cost and privacy), potential end users (e.g., technology literacy and attitudes about technology), organization structure and climate (e.g., budget and infrastructure), and factors external to organizations (e.g., broadband accessibility and reimbursement policies). Number of reported barriers was higher among respondents representing agencies with lower annual budgets and smaller client bases relative to higher budget, larger clientele organizations. Individual barriers were differentially associated with budget, size of client base, and geographic location. Results are discussed in light of implementation science frameworks and proactive strategies to address perceived obstacles to adoption and use of technology-based behavioral health tools.

Internet-based intervention for mental health and substance use problems in disaster-affected populations: a pilot feasibility study.
Ruggiero KJ¹, Resnick HS, Aciero R, Coffey SF, Carpenter MJ, Ruscio AM, Stephens RS, Kilpatrick DG, Stasiewicz PR, Hoffman RA, Bucuvalas M, Galea S.¹
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Early interventions that reduce the societal burden of mental health problems in the aftermath of disasters and mass violence have the potential to be enormously valuable. Internet-based interventions can be delivered widely, efficiently, and at low cost and as such are of particular interest. We describe the development and feasibility analysis of an Internet-delivered intervention designed to address mental health and substance-related reactions in disaster-affected populations. Participants (n = 285) were recruited from a cohort of New York City-area residents that had been followed longitudinally in epidemiological research initiated 6 months after the terrorist attacks of September 11, 2001. The intervention consisted of 7 modules: posttraumatic stress/panic, depression, generalized anxiety, alcohol use, marijuana use, drug use, and cigarette use. Feasibility data were promising and suggest the need for further evaluation.

The remote brief intervention and referral to treatment model: Development, functionality, acceptability, and feasibility.
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BACKGROUND:
Screening, brief intervention, and referral to treatment (SBIRT) is effective for reducing risky alcohol use across a variety of medical settings. However, most programs have been unsustainable because of cost and time demands. Telehealth may alleviate on-site clinician burden. This exploratory study examines the feasibility of a new Remote Brief Intervention and Referral to Treatment (R-BIRT) model.

METHODS:
Eligible emergency department (ED) patients were enrolled into one of five models. (1) Warm Handoff: clinician-facilitated phone call during ED visit. (2) Patient Direct: patient-initiated call during visit. (3) Electronic Referral: patient contacted by R-BIRT personnel post visit. (4) Patient Choice: choice of models 1-3. (5) Modified Patient Choice: choice of models 1-2, Electronic Referral offered if 1-2 were declined.
Once connected, a health coach offered assessment, counseling, and referral to treatment. Follow up assessments were conducted at 1 and 3 months. Primary outcomes measured were acceptance, satisfaction, and completion rates.

**RESULTS:**

Of 125 eligible patients, 50 were enrolled, for an acceptance rate of 40%. Feedback and satisfaction ratings were generally positive. Completion rates were 58% overall, with patients enrolled into a model wherein the consultation occurred during the ED visit, as opposed to after the visit, much more likely to complete a consultation, 90% vs. 10%, $\chi^2(4, N=50)=34.8, p<0.001.$

**CONCLUSIONS:**

The R-BIRT offers a feasible alternative to in-person alcohol SBIRT and should be studied further. The public health impact of having accessible, sustainable, evidence-based SBIRT for substance use across a range of medical settings could be considerable.

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**Successful Organizational Strategies to Sustain Use of A-CHESS: A Mobile Intervention for Individuals With Alcohol Use Disorders.**

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**BACKGROUND:**

Mobile health (mHealth) services are growing in importance in health care research with the advancement of wireless networks, tablets, and mobile phone technologies. These technologies offer a wide range of applications that cover the spectrum of health care delivery. Although preliminary experiments in mHealth demonstrate promising results, more robust real-world evidence is needed for widespread adoption and sustainment of these technologies.

**OBJECTIVE:**

Our aim was to identify the problems/challenges associated with sustained use of an mHealth addiction recovery support app and to determine strategies used by agencies that successfully sustained client use of A-CHESS.

**METHODS:**

Qualitative inquiry assessed staff perceptions about organizational attributes and strategies associated with sustained use of the mobile app, A-CHESS. A total of 73 interviews of clinicians and administrators were conducted. The initial interviews (n=36) occurred at the implementation of A-CHESS. Follow-up interviews (n=37) occurred approximately 12 and 24 months later. A coding scheme was developed and Multiuser NVivo was used to manage and analyze the blinded interview data.

**RESULTS:**

Successful strategies used by treatment providers to sustain A-CHESS included (1) strong leadership support, (2) use of client feedback reports to follow up on non-engaged clients, (3) identify passionate staff and incorporate A-CHESS discussions in weekly meetings, (4) develop A-CHESS guidelines related to client use, (5) establish internal work groups to engage clients, and (6) establish a financial strategy to sustain A-CHESS use. The study also identified attributes of A-CHESS that enhanced as well as inhibited its sustainability.

**CONCLUSIONS:**

Mobile apps can play an important role in health care delivery. However, providers will need to develop strategies for engaging both staff and patients in ongoing use of the apps. They will also need to rework business processes to accommodate the changes in communication frequency and style, learn to use app data for decision making, and identify financing mechanisms for supporting these changes.


**Text messaging for addiction: a review.**

**Keoleian V, Polcin D, Galloway GP.**

1a Research Intern, New Leaf Treatment Center (NLTC), Lafayette, CA.

**Abstract**

Individuals seeking treatment for addiction often experience barriers due to cost, lack of local treatment resources, or either school or work schedule conflicts. Text-messaging-based addiction treatment is
inexpensive and has the potential to be widely accessible in real time. We conducted a comprehensive literature review identifying 11 published, randomized controlled trials (RCTs) evaluating text-messaging-based interventions for tobacco smoking, four studies for reducing alcohol consumption, one pilot study in former methamphetamine (MA) users, and one study based on qualitative interviews with cannabis users. Abstinence outcome results in RCTs of smokers willing to make a quit attempt have been positive overall in the short term and as far out as at six and 12 months. Studies aimed at reducing alcohol consumption have been promising. More data are needed to evaluate the feasibility, acceptability, and efficacy of this approach for other substance use problems.

Free PMC Article


Evaluation of a telementoring intervention for pain management in the Veterans Health Administration.

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9Office of Specialty Care, Veterans Health Administration, Washington, DC, USA.

OBJECTIVE:
Half of all Veterans experience chronic pain yet many face geographical barriers to specialty pain care. In 2011, the Veterans Health Administration (VHA) launched the Specialty Care Access Network-ECHO (SCAN-ECHO), which uses telehealth technology to provide primary care providers with case-based specialist consultation and pain management education. Our objective was to evaluate the pilot SCAN-ECHO pain management program (SCAN-ECHO-PM).

DESIGN AND SETTING:
This was a longitudinal observational evaluation of SCAN-ECHO-PM in seven regional VHA healthcare networks.

METHODS:
We identified the patient panels of primary care providers who submitted a consultation to one or more SCAN-ECHO-PM sessions. We constructed multivariable Cox proportional hazards models to assess the association between provider SCAN-ECHO-PM consultation and 1) delivery of outpatient care (physical medicine, mental health, substance use disorder, and pain medicine) and 2) medication initiation (antidepressants, anticonvulsants, and opioid analgesics).

RESULTS:
Primary care providers (N = 159) who presented one or more SCAN-ECHO-PM sessions had patient panels of 22,454 patients with chronic noncancer pain (CNCP). Provider consultation to SCAN-ECHO-PM was associated with utilization of physical medicine [hazard ratio (HR) 1.10, 95% confidence interval (CI) 1.05-1.14] but not mental health (HR 0.99, 95% CI 0.93-1.05), substance use disorder (HR 0.93, 95% CI 0.84-1.03) or specialty pain clinics (HR 1.01, 95% CI 0.94-1.08). SCAN-ECHO-PM consultation was associated with initiation of an antidepressant (HR 1.09, 95% CI 1.02-1.15) or anticonvulsant medication (HR 1.13, 95% CI 1.06-1.19) but not an opioid analgesic (HR 1.05, 0.99-1.10).

CONCLUSIONS:
SCAN-ECHO-PM was associated with increased utilization of physical medicine services and initiation of nonopioid medications among patients with CNCP. SCAN-ECHO-PM may provide a novel means of building pain management competency among primary care providers.


Telepsychological services with criminal justice and substance abuse clients: A systematic review and meta-analysis.

Batastini AB1, King CM2, Morgan RD1, McDaniel B1.
Recent years have seen the incorporation of telepsychology into poorly accessed, rural, and underserved settings, including criminal justice and substance abuse treatment. A systematic search of the literature on telepsychological and related services with justice-involved and substance abuse clients revealed numerous descriptive reports, but few empirical studies. The results of 3 studies of criminal justice participants and 2 studies of substance-abuse participants were subjected to a series of 5 outcome-specific meta-analyses (mental health symptoms, therapeutic processes, program engagement, program performance, and service satisfaction). These 5 studies, all of which utilized a comparison group, contributed a total of 342 participants and 14 total effect sizes. Summary data on 3 additional uncontrolled studies are also presented. Results indicated that telepsychological outcomes were at least comparable with in-person outcomes. This review serves as an initial reference for clinicians and policymakers working with criminal justice and substance abuse clients, but also highlights the need for more rigorous scientific investigation into the nuances of telepsychological practice. (PsycINFO Database Record

Abstract

Relapse after alcoholism treatment is high. Alcohol Therapeutic Interactive Voice Response (ATIVR) is an automated telephone program for posttreatment self-monitoring, skills practice, and feedback. This pilot study examined feasibility of ATIVR. Participants (n = 21; 57% male) had access to ATIVR for 90 days following outpatient group cognitive-behavioral therapy (CBT) to make daily reports of mood, confidence in sobriety, urges to use substances, and actual use. Reports of relapse or risk were followed with additional questions. Participants received personalized therapist feedback based on responses, and could access recorded CBT skill reviews. Pre-post assessments included: alcohol consumption (Timeline Follow-Back), self-efficacy (Situational Confidence Questionnaire), and perceived coping ability (Effectiveness of Coping Behaviors Inventory). Participants called on 59% of scheduled days and continued making calls for an average of 84 days. Following ATIVR, participants gave feedback that ATIVR was easy to use and increased self-awareness. Participants particularly liked the therapist feedback component. Abstinence rate increased significantly during ATIVR (p = .03), and both self-efficacy and coping significantly improved from pre-CBT to post-ATIVR (p < .01). Results indicate ATIVR is feasible and acceptable. Its efficacy should be evaluated in a randomized controlled trial.


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A smartphone application to support recovery from alcoholism: a randomized clinical trial.

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3Fayette Companies, Peoria, Illinois.
4North Shore Community College, Lynn, Massachusetts.
5Mass Communications Research Center, School of Journalism and Mass Communication, University of Wisconsin-Madison

Abstract

IMPORTANCE:
Patiens leaving residential treatment for alcohol use disorders are not typically offered evidence-based continuing care, although research suggests that continuing care is associated with better outcomes. A smartphone-based application could provide effective continuing care.

OBJECTIVE:
To determine whether patients leaving residential treatment for alcohol use disorders with a smartphone application to support recovery have fewer risky drinking days than control patients.
DESIGN, SETTING, AND PARTICIPANTS:
An unmasked randomized clinical trial involving 3 residential programs operated by 1 nonprofit treatment organization in the Midwestern United States and 2 residential programs operated by 1 nonprofit organization in the Northeastern United States. In total, 349 patients who met the criteria for DSM-IV alcohol dependence when they entered residential treatment were randomized to treatment as usual (n = 179) or treatment as usual plus a smartphone (n = 170) with the Addiction-Comprehensive Health Enhancement Support System (A-CHESS), an application designed to improve continuing care for alcohol use disorders.

INTERVENTIONS:
Treatment as usual varied across programs; none offered patients coordinated continuing care after discharge. A-CHESS provides monitoring, information, communication, and support services to patients, including ways for patients and counselors to stay in contact. The intervention and follow-up period lasted 8 and 4 months, respectively.

MAIN OUTCOMES AND MEASURES:
Risky drinking days--the number of days during which a patient's drinking in a 2-hour period exceeded 4 standard drinks for men and 3 standard drinks for women, with standard drink defined as one that contains roughly 14 g of pure alcohol (12 oz of regular beer, 5 oz of wine, or 1.5 oz of distilled spirits). Patients were asked to report their risky drinking days in the previous 30 days on surveys taken 4, 8, and 12 months after discharge from residential treatment.

RESULTS:
For the 8 months of the intervention and 4 months of follow-up, patients in the A-CHESS group reported significantly fewer risky drinking days than did patients in the control group, with a mean of 1.39 vs 2.75 days (mean difference, 1.37; 95% CI, 0.46–2.27; P = .003).

CONCLUSIONS AND RELEVANCE:
The findings suggest that a multifeatured smartphone application may have significant benefit to patients in continuing care for alcohol use disorders.

Mobile phone use patterns and preferences in safety net office-based buprenorphine patients.
Tofighi B, Grossman E, Buirkle E, McNeely J, Gourevitch M, Lee JD.
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Abstract
BACKGROUND:
Integrating mobile phone technologies in addiction treatment is of increasing importance and may optimize patient engagement with their care and enhance the delivery of existing treatment strategies. Few studies have evaluated mobile phone and text message (TM) use patterns in persons enrolled in addiction treatment, and none have assessed the use in safety net, office-based buprenorphine practices.

METHODS:
A 28-item, quantitative and qualitative semistructured survey was administered to opiate-dependent adults in an urban, publicly funded, office-based buprenorphine program. Survey domains included demographic characteristics, mobile phone and TM use patterns, and preferences pertaining to their recovery.

RESULTS:
Surveyors approached 73 of the 155 eligible subjects (47%); 71 respondents completed the survey. Nearly all participants reported mobile phone ownership (93%) and TM use (93%), and most reported "very much" or "somewhat" comfort sending TM (79%). Text message contact with 12-step group sponsors, friends, family members, and counselors was also described (32%). Nearly all preferred having their providers' mobile phone number (94%), and alerting the clinic via TM in the event of a potential relapse to receive both supportive TM and a phone call from their buprenorphine provider was also well received (62%).

CONCLUSIONS:
Mobile phone and TM use patterns and preferences among this sample of office-based buprenorphine participants highlight the potential of adopting patient-centered mobile phone-based interventions in this treatment setting.

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**Development and Feasibility of a Cell Phone-Based Transitional Intervention for Women Prisoners with Comorbid Substance Use and Depression.**

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Abstract

This article describes the development and feasibility testing of a cell phone-based intervention (Sober Network IPT) among 22 women with comorbid substance use and depressive disorders transitioning from prison to surrounding communities. Feasibility/acceptability measures included phone logs, exit interviews, and pre-post measures of substance use and depressive symptoms up to 9 months post-release. Results indicated that phone-based transitional treatment is feasible and acceptable. Participants valued the opportunity to maintain contact with familiar prison treatment providers by phone after release, and used the cell phones for help with service linkage, support, and crisis management. We describe relational and practical lessons learned.

KEYWORDS:
major depressive disorder; substance use disorders; telehealth; therapeutic relationship; women


**A Comparison of Mental Health Diagnoses Treated via Interactive Video and Face to Face in the Veterans Healthcare Administration.**

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Abstract

**OBJECTIVE:**

This study compares the mental health diagnoses of encounters delivered face to face and via interactive video in the Veterans Healthcare Administration (VHA).

**MATERIALS AND METHODS:**

We compiled 1 year of national-level VHA administrative data for Fiscal Year 2012 (FY12). Mental health encounters were those with both a VHA Mental Health Stop Code and a Mental Health Diagnosis (n=11,906,114). Interactive video encounters were identified as those with a Mental Health Stop Code, paired with a VHA Telehealth Secondary Stop Code. Primary diagnoses were grouped into posttraumatic stress disorder (PTSD), depression, anxiety, bipolar disorder, psychosis, drug use, alcohol use, and other.

**RESULTS:**

In FY12, 1.5% of all mental health encounters were delivered via interactive video. Compared with face-to-face encounters, a larger percentage of interactive video encounters was for PTSD, depression, and anxiety, whereas a smaller percentage was for alcohol use, drug use, or psychosis.

**CONCLUSIONS:**

Providers and patients may feel more comfortable treating depression and anxiety disorders than substance use or psychosis via interactive video.

**KEYWORDS:**

behavioral health; technology; telecommunications; telepsychiatry


**Non-adherence to telemedicine interventions for drug users: systematic review.**

[Article in English, Portuguese]
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Abstract

OBJECTIVE To estimate rates of non-adherence to telemedicine strategies aimed at treating drug addiction. METHODS A systematic review was conducted of randomized controlled trials investigating different telemedicine treatment methods for drug addiction. The following databases were consulted between May 18, 2012 and June 21, 2012: PubMed, PsycINFO, SciELO, Wiley (The Cochrane Library), Embase, Clinical trials and Google Scholar. The Grading of Recommendations Assessment, Development and Evaluation was used to evaluate the quality of the studies. The criteria evaluated were: appropriate sequence of data generation, allocation concealment, blinding, description of losses and exclusions and analysis by intention to treat. There were 274 studies selected, of which 20 were analyzed. RESULTS Non-adherence rates varied between 15.0% and 70.0%. The interventions evaluated were of at least three months duration and, although they all used telemedicine as support, treatment methods differed. Regarding the quality of the studies, the values also varied from very poor to high quality. High quality studies showed better adherence rates, as did those using more than one technique of intervention and a limited treatment time. Mono-user studies showed better adherence rates than poly-user studies. CONCLUSIONS Rates of non-adherence to treatment involving telemedicine on the part of users of psychoactive substances differed considerably, depending on the country, the intervention method, follow-up time and substances used. Using more than one technique of intervention, short duration of treatment and the type of substance used by patients appear to facilitate adherence.

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