Tele-Recovery: Enhancing Recovery Support Services Using Telephone-based Interventions

On Day 1 of the National Frontier and Rural ATTC 2014 Addiction Treatment Technology Summit, a panel of three top researchers presented findings from studies showing that automated telephone-based interventions and smartphone applications can provide effective support to individuals in recovery

**Michael Dennis,** PhD, a senior research psychologist and Director of the Global Appraisal of Individual Needs (GAIN) coordinating center at Chestnut Health Systems, shared an intervention specifically targeted at providing recovery support to an adolescent population discharged from residential treatment. The pilot study used a text message to prompt the individual to complete an ecological momentary assessment (EMA) or ecological momentary intervention (EMI) on their smartphone as a form of monitoring and receiving feedback. EMA’s were randomly prompted from participants six times a day during the six week trial and took approximately two to three minutes to complete. The system utilized A-CHESS and provided recovery support, relaxation help, recovery motivation, and social networking as an early intervention method. The recovery support feature was utilized by participants the most. Engaging in the EMI’s was associated with a significant reduction in use over the next seven days.

**Brent Moore,** PhD, Associate Research Scientist in the Department of Psychiatry at Yale University School of Medicine, provided a detailed description of the Recovery Line, its development, evidence of acceptability, feasibility and initial efficacy, current research findings, and application to other technologies and interventions. When surveyed by Dr. Moore’s research team, more buprenorphine/naloxone treatment patients had access to cell phones than to the internet, leading Moore and colleagues to adopt therapeutic interactive voice response (TIVR) as their chosen intervention method. TIVR is low cost, accessible anywhere and anytime, secure, and easy to make alterations to as needed. Clients reported the system was helpful and easy to use. Changes have been made to the system to: use more colloquial language; remove the machine-generated voice; include brief learning modules; make the session choices more client-driven; allow more opportunities for engaging activities and skills practice; and provide encouragement. The system increased access to care, as over half (58%) of the calls into the system were during hours in which the clinic was not open. On days that clients called into the recovery line, they were more likely to remain abstinent. Dr. Moore posed questions for future research such as, do functions of the system increase client engagement and use (e.g., personalization, reminders to access the system, setting). Key points were as follows:

- Fully automated systems offer a number of potential advantages: low cost, consistent delivery, greater accessibility and availability of treatment, increased flexibility of scheduling and convenience, high user acceptance and utilization, may even be preferable to one-on-one therapy among clients who dislike therapy or have concerns about confidentiality.
- The Recovery Line was developed for patients to use in their own environment and obtain immediate assistance, training, and support for improved coping. Modules are brief and easy to understand. The system has content based on CBT theory and principals and was reviewed for appropriate language and acceptability by providers and patients.
- Components of The Recovery Line include (1) self-monitoring, (2) coping with urges and cravings, (3) identifying/avoiding risky situations, and (4) managing moods and stress.
- Since IVR technologies are easily scalable, the Recovery Line has the potential to be easily and rapidly implemented in a variety of contexts to provide a low-cost, accessible intervention to support and enhance opioid dependence treatment.
- Opportunities for improving results include more research about effective ways to promote daily use (such as reminder calls or texts, or specific appointments to call in).
William Campbell, MS works at Behavior Therapy Associates in Albuquerque, New Mexico and conducts research on factors that mediate engagement with, and effectiveness of, technology-based interventions. Mr. Campbell discussed three computer-delivered interventions: Drinker’s Check-up.com, OvercomingAddictions.net, and RightTurns.com. Drinker’s Check-Up (DCU) provides users the opportunity to complete an alcohol screening and brief intervention based on personalized information. Through the use of an empathic tone, ability to anticipate user reactions, consistent delivery, and providing accurate feedback, Drinker’s Check-up has decreased average drinks per day and average peak BAC on drinking days. Overcoming Addictions (OA) is an online program based on four components: 1) building and maintaining motivation; 2) dealing with urges and triggers; 3) managing thoughts, feelings, and actions, and 4) developing new behaviors and lifestyle choices through videos, exercises, feedback, email reminders, and customizable texts. A recent randomized control trial provided positive evidence for OA reducing drinks per drinking day and alcohol-related problems and gave some lessons to address in future research. Right Turns is an online intervention designed for first-time DUI offenders that combines DCU and OA. The DCU portion is delivered in clinic and then the individual completes the OA components at home. In addition, an email guidance system and enhanced videos have been added to Right Turns. Pilot testing for Right Turns is currently underway.

Below is a list of recent publications on each of the interventions:


