**Dynamic, Real Time Prediction of Alcohol Use Lapse Using mHealth Technologies***Funded by the National Institute of Alcohol Abuse and Alcoholism*

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**Study Purpose:**   
To examine the effectiveness and ability of mobile and wireless devices to indicate if and when a recovering alcoholic is at-risk of relapse. The applied research goal is to create a relapse prediction signal that will alert treatment providers, in real-time, when their client is at-risk of relapse and in turn provide them with supportive services aimed at preventing relapse.

**Recruitment Goal:** N=200

**Recruitment Method:**   
Clinician will provide appropriate clients with a brochure, with an attached bus pass, outlining the essential study information and encourage client to contact the recruitment line if they are interested in learning more about participation. Once client contacts the recruitment line, they will complete a brief phone screen. If they pass the phone screen, and are still interested in the study, they will be invited to the lab to complete the initial screening interview. Their final eligibility will be confirmed after the initial screening visit. All eligible participants will be invited to enroll in the study.

**Eligibility Criteria:**

* 18 or older
* Must be able to read and write in English
* Abstinent for at least 1 week and no longer than 2 months at study intake
* Meet criteria for Alcohol use disorder with at least moderate severity
* No lifetime history of severe and persistent mental illness (SPMI; e.g., bipolar disorder, schizophrenia, or psychosis)
* Agree to adopt use of study iPhone and transfer existing cell phone number onto study phone to establish it as their primary phone.

**What Participants will be Required to Do:**  
Consent to participate in data collection for three-month duration. Data collection will occur during monthly visits to our lab, and between visits where participants’ physiology, sleep habits, social interactions, and GPS will be monitored through the use of mHealth technology.

**What data will we collect:**

* Structured Clinical Interview for DSM Disorders-Research Version (SCID-5-RV)
* Self-report questionnaires during all study visits to our lab (5 Lab Visits: Screen, Intake, and 3 Follow-up Sessions)
* Blood alcohol level during all study visits
* EMA surveys (4x daily) on the iPhone
* Passive daily monitoring of location and social interactions (call & text logs) via iPhone
* Sleep quality via use of sleep monitor
* Physiology via use of wearable that will collect heart rate, skin temperature, activity level, and electrodermal activity
* Audio response to daily check-in question: How are you feeling overall and in your recovery?

**Abstinence support:**

All participants are provided with:

* ACHESS continuing care support app on their iPhone
* Access to an addiction support discussion board for peer support during study participation
* Participants who report a lapse during their study participation will be offered 30-minutes of brief motivational enhancement treatment. They will also be encouraged to follow-up with their treatment provider, or explore enrolling in services if they do not have a treatment provider.

**Compensation:**  
Participants can earn up to $807.00. Below is a breakdown of the compensation:

* $20/hour for all time spent in the lab (Est.7.5 Hours=$150)
* $198 - 3 months of unlimited talk, text, and data plan
* $75 - 90% completion of daily EMA surveys
* $120 - Global Measure, Carrying cell phone 90% of the time
* $45 - 90% collection rate for heart rate and galvanic skin response data
* $45 - 90% collection rate for movement data (accelerometer)
* $45 - 90% collection rate for sleep quality data
* $30 - GPS Data
* $99 Bonus-iPhone for Completing the Study

Participants are also allowed to keep their study iPhone after completion of the study.