

## Personalized “Recovery Avatar” To Regulate Substance Craving in Real-Time

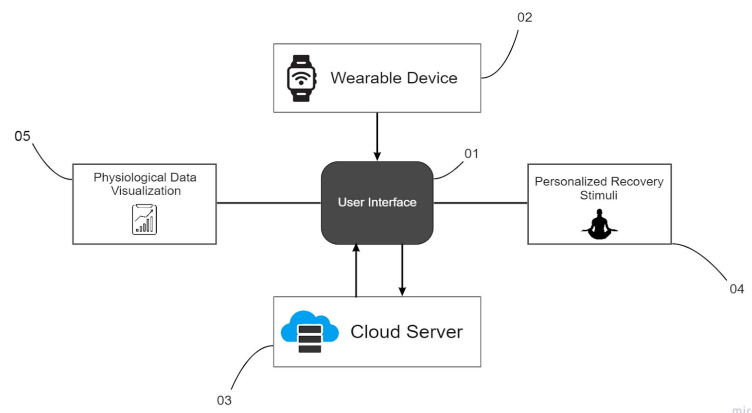
On discharge, patients who participate in substance abuse programs face high relapse rates. **REMind-h™** is an innovative tool that helps individuals in recovery regulate their responses to drug craving cues. When a worn device (e.g. a Fitbit) detects certain heart rate variabilities (HRV's) due to neurophysiological reactions to craving triggers, the personal recovery cue system activates at once on the individual's mobile device.

The process begins with a counselor who collects a host of the person's positive and negative triggers. The system captures recovery cues, which include personal positive images, objects, sensory experiences, etc. These are paired with recovery commitments that evoke the person's positive cognitive-affective states. From these, the **REMind-h™** system creates a personalized “Recovery Avatar,” a digital representation of the person at his or her “best-regulated self.” When presented with a trigger that results in a craving, causing a person's HRV to reach a given threshold, the Recovery Avatar immediately presents a recovery cue on the person's mobile phone. The cue is pulled from one of the saved recovery strategies to help the person recognize and resist the stimulus/stimuli.

If the recovery cue is ineffective in creating a pre-defined HRV change in a pre-determined time, the app will deactivate that recovery cue and go to another. The app uses artificial intelligence to continue to refine the communications between the HRV data and the positive interventions, learning which positive triggers are more effective in certain situations. Over time, the system becomes more and more personalized.

### Advantages of **REMind-h™**:

- Motivates patients to stay connected to recovery goals in their natural environment.
- Instantaneous intervention
- Can be used for PTSD interventions and other mental disorders
- Useful for stopping any addiction, including alcohol or smoking



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