

Human-Centered Interface and System Design for Saving Lives

Cincinnati, Ohio

A Community Based Harm Reduction Solution for the Opioid Crisis.

WHAT IS NARCONNECT?

NarConnect is designed to combat the increasing rates of opioid overdose deaths. It is a comprehensive kit, offering its users with a physiological monitor to measure vitals, and a mobile application to develop customized support plans. It does so by converting any space into an immediate safe use site. The proposed solution was developed using co-design methods to ensure that the system and features are rooted in human-centered design.

WHY DOES IT MATTER?

Deaths caused by opioids such as heroin have been increasing since 2010. This was further aggravated by the involvement of synthetic opioids, especially illicitly manufactured fentanyl in 2013. In 2021, CDC reported 5,406 drug overdose deaths in Ohio. 53.5% of these cases had at least one potential opportunity for intervention. Moreover, 26.3% cases had a potential bystander present.

Someone just like you and me.



- Many individuals who use drugs not only use alone because of their preference, but also because of the stigma attached to Opioid Use Disorder (OUD). This stigma exists because of the deep-rooted stereotypes about people struggling with addiction. Due to this, people who use drugs are often perceived as dangerous, or as individuals who have failed morally. Apart from this, many also struggle with socio-economic challenges such as homelessness and unemployment. These perceptions and conditions have perpetuated the negative attitude and treatment towards individuals struggling with addiction and OUD.
- There is still a lack of awareness among the general population about the complex nature of OUD, the physiologic dependence on drugs and the intense symptoms associated to withdrawal.
- The solution to the opioid epidemic can no longer be restricted to ostracism, punitive measures, and rehabilitation. An environment of care, support, trust, and equality must be built in order to help people remain safe and have access to health and wellbeing resources. Furthermore, these resources must be established with empathy and promote the role of local communities to reduce the stigma associated with OUD.



HOW DOES IT WORK?

NarConnect provides its users support through a wearable device and a mobile application.

The wearable device consists of a physiological monitor that gives users the ability to track their vitals, i.e., respiration rate, oxygen saturation rate and heart rate. The mobile application is designed to offer users different forms of support based on their privacy needs. It allows users to design support plans and involve the people they trust to receive assistance in the event of an overdose.

The mobile application also provides users access to various safety resources such as information regarding local housing and treatment centers, safe use supplies such as fentanyl test strips and educational resources.

SCHOOL OF DESIGN
PROFESSORS: DR. CLAUDIA B. REBOLA
DR. DANIEL ARENDT
STUDENTS: CRISTELLE MATHEWS

DAAP
cares2023

