Abstract

Jefferson County, Alabama has alarming opioid statistics. The Jefferson County Alabama Coroner saw a 140% spike in heroin deaths in 2014, and an even more distressing 340% increase in fentanyl deaths from 2013 to 2016 (Jefferson County Coroner/Medical Examiner’s Office 2017). Studies indicate that individuals with prior incidents of non-fatal opioid overdose are among those at greatest risk for subsequent overdose (Wolfenden and Wiggers 2014). Evidence suggests that lack of awareness of, and lack of utilizing available behavioral health resources contributes to exacerbation of mental illness and substance abuse (Johnson et al. 2015). Community health leaders are searching for effective and sustainable models to address these challenges. This research takes an action-design research approach to investigate socio-technical interventions designed and applied to enable improvements to support a Jefferson County Department of Health person-centered peer navigator (PN) initiative through mobile and web-based technologies to coordinate and support client and PN needs. Trained PNs will support, educate, and facilitate clients accessing available community resources, while mobile health technologies will be used to connect clients with resources and collect essential data to measure program outcomes critical for sustaining and maximizing the program’s success and impact.

This study uses an Information Systems Design Theory (ISDT) approach to design a mobile web-based application to aid in providing continuity of PN services and community resources for opioid at-risk clients. Consistent with ISDT, artifact development will consist of four components: 1) meta-requirements, 2) meta-design, 3) kernel theories, and 4) testable design propositions (Walls, Widmeyer, and El Sawy 1992). User Centered Design (UCD) methods will guide the design process as we work closely with our community partner to ensure a useable and useful socio-technical service model for addressing the opioid epidemic in Jefferson County Alabama, with potential application elsewhere.

References


