

Adapting Naloxone Distribution to Reach Young Adults

Nicole Wagner, PhD^{1,2}, Allison Kempe^{1,3}, MD, Juliana Barnard, MA^{1,3}, Deborah Rinehart^{2,6}, PhD, Ed Havranek^{4,6}, MD, Joshua Blum, MD^{2,6}, Russell Glasgow, PhD^{1,5}, Megan Morris, PhD^{1,2}

Adult and Child Center for Health Outcomes Research and Delivery Science, Children's Hospital Colorado, Aurora, CO¹;
 University of Colorado Anschutz School of Medicine, Division of Internal Medicine², Department of Pediatrics³, Division of Cardiology⁴, and Department of Family Medicine⁵;
 Center for Health Systems Research, Denver Health and Hospital Authority⁶

BACKGROUND

There has been a sharp increase in opioid overdose deaths. Take home naloxone (THN) programs have been shown to effectively reverse opioid overdose events with limited adverse events, yet often miss young adults who misuse opioids. Strategies to adapt naloxone distribution programs to reach young adults are needed. Public health vending machines (PHVM), shown to increase access to syringes in young adults in Europe is an emerging, community-initiated naloxone distribution adaptation in the U.S. However, little is currently known about U.S. young adults' perspectives of PHVMs and how they may contribute to naloxone uptake.

STUDY OBJECTIVES

Identify perceived factors contributing to naloxone uptake under current THN, ideal, and PHVMs in young adults who misuse opioids

METHODS

Study Design

Qualitative Interviews using content analysis

Eligibility criteria

- 18-30 years of age
- witnessed or experienced an opioid overdose, or used nonmedical opioids in the last 4 months

Setting

- Substance use treatment services in an integrated safety net health system in Colorado. (Denver Health)

Recruitment

- Waiting room (MAT treatment)

Interview

- Guided by Practical, Robust, Implementation and Sustainability Model (PRISM)
- Patient perspective
- Reflect on time before treatment

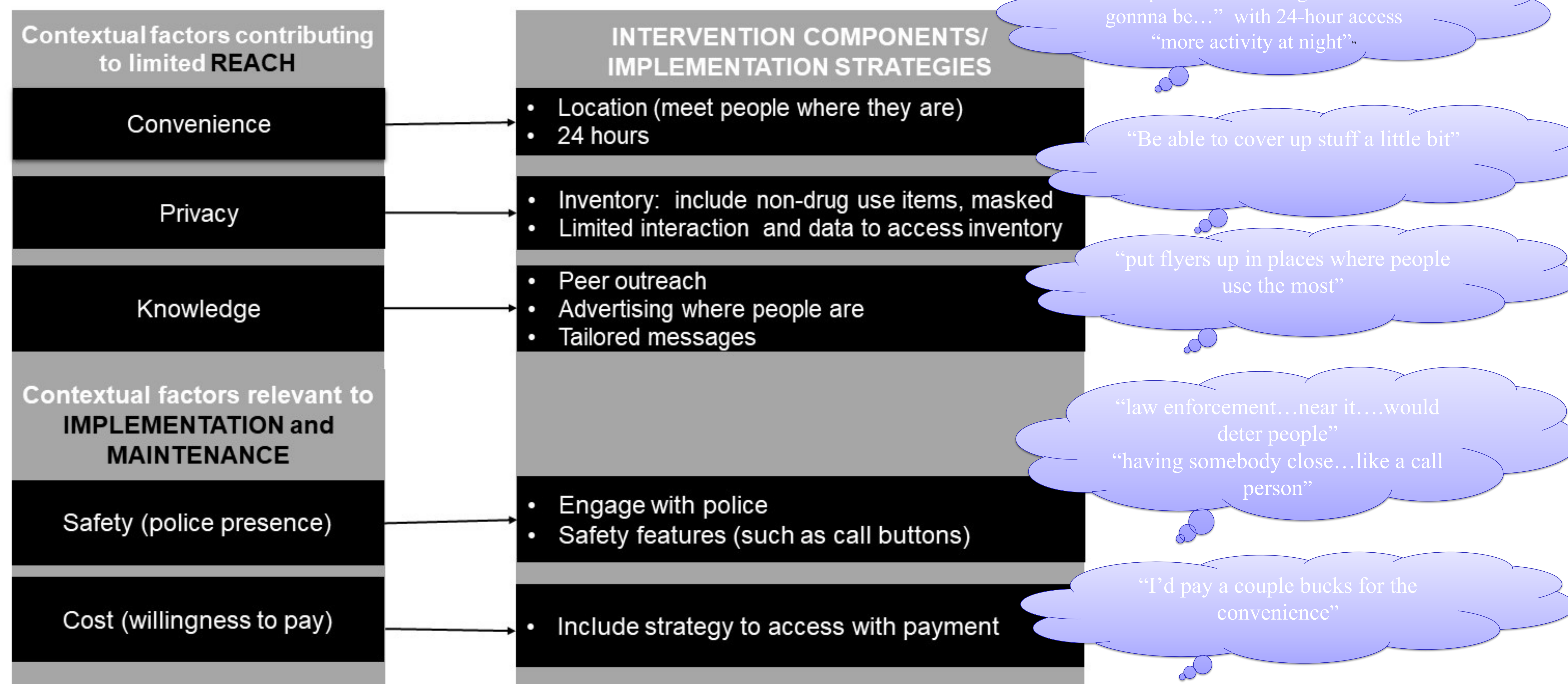
Analysis

- Coded by team-based methods
- Iterative, inductive-deductive approach for consensus-identified themes

RESULTS

- 16 participants
 - 14 experienced or witnessed an overdose (8 experiencing both)
 - Substance use
 - 16 reported non-medical prescription opioid use in their lifetime
 - 11 heroin use
 - 6 were female and less than highschool education
 - 15 below 200% poverty level

Themes	Barriers to Naloxone Uptake
Convenience: easy to access	"They [substance use treatment provider] provided me a bag of stuff...that [naloxone] was included in there, so it was nice."
Privacy: fear of judgement	"When you're on drugs you don't trust anybody really. You believe everyone's setting you up."
Knowledge: naloxone awareness	"We are in a small town, and the whole small town did drugs. I never heard of Narcan."



CONCLUSIONS

Our results suggest providing anonymous and convenient access points to naloxone in the community will increase naloxone uptake. PHVMs may present an opportunity to increase uptake if features of the physical location and access strategies are considered

Funding

This work was supported by the National Institute of Heart Lung and Blood Institute [grant number: K12HL137862]

Citations

Ahmed, F., Rossen, L., Sutton, P., 2021. Provisional drug overdose death counts. National Center for Health Statistics.

McDonald, R., Strang, J., 2016. Are take-home naloxone programmes effective? Systematic review utilizing application of the Bradford Hill criteria. *Addiction* 111(7), 1177-1187.

Bernstein, A.B., 2004. Health care in America: Trends in utilization. Center for Disease Control and Prevention, National Center for Health Statistics.

Stockings, E., Hall, W.D., Lynskey, M., Morley, K.I., Reavley, N., Strang, J., Patton, G., Degenhardt, L., 2016. Prevention, early intervention, harm reduction, and treatment of substance use in young people. *Lancet Psychiatry* 3(3), 280-296.

Frank, D., Mateu-Gelabert, P., Guarino, H., Bennett, A., Wendel, T., Jessell, L., Teper, A., 2015. High risk and little knowledge: Overdose experiences and knowledge among young adult nonmedical prescription opioid users. *International Journal of Drug Policy* 26(1), 84-91

Islam, M.M., Wodak, A., Conigrave, K.M., 2008. The effectiveness and safety of syringe vending machines as a component of needle syringe programmes in community settings. *International Journal of Drug Policy* 19(6), 436-441.