

Retrospective Analysis of Suboxone Initiation in an Urban Street Medicine Program

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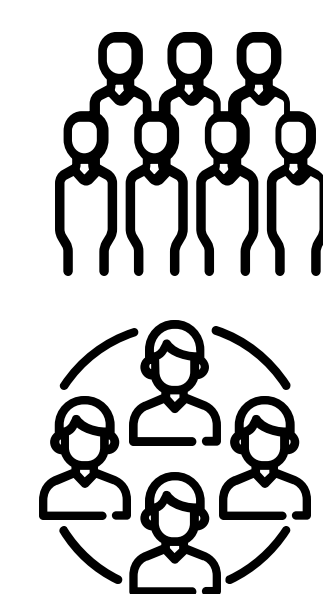
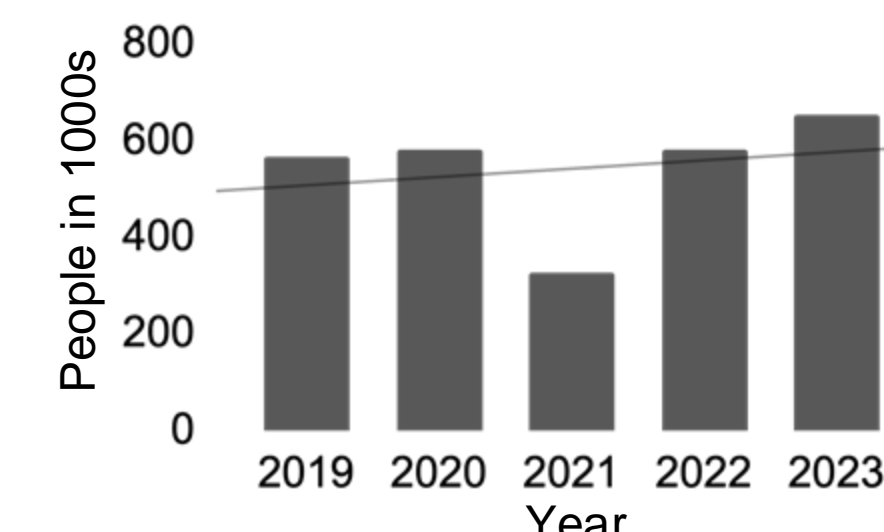


COLLEGE OF MEDICINE

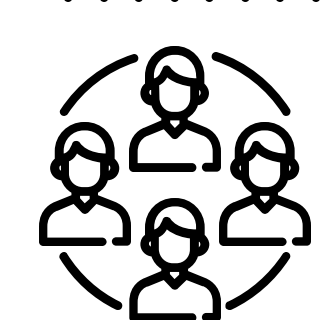


INTRODUCTION

Homelessness is a growing national crisis, with a record-high 653,104 people experiencing homelessness on a single night in January 2023, representing a 12.1% increase over the previous year. People experiencing homelessness (PEH) are particularly susceptible to adverse health outcomes.

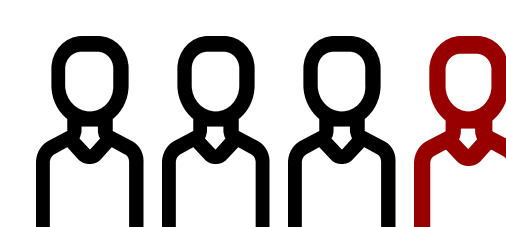


71% of PEH are adults



29% of PEH include families

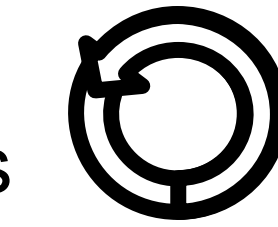
PEH are at high risk for addiction including opioid use disorder (OUD) and overdose, with substance use cited as both a contributor and response to homelessness.



Overdose accounts for over 1 in 4 deaths among PEH



Stressors of homelessness



Economic and social strain of substance use

Street medicine (SM) programs represent key avenues for the initiation of medication for opioid use disorder (MOUD), including Suboxone.

AIMS

1. Describe the characteristics of patients initiated on Suboxone by an urban SM program.
2. Evaluate all-cause, OUD-related, and overdose-related emergency department (ED) utilization before versus after SM-initiated Suboxone prescription.

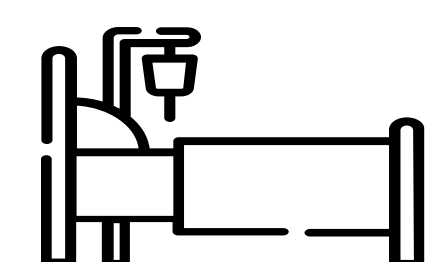
METHODS

Study Design & Patient Population

- Retrospective chart review of all patients initiated on Suboxone from 1/1/22 – 12/31/23 by an urban, midwestern SM program.

Outcome Measures

- Change in all-cause, OUD-related, or overdose-related ED visits 12 months before compared to 12 months after initiating Suboxone
 - Analyzed at cohort and individual levels
- Secondary analyses by gender, age, and Suboxone prescription renewal status
 - Age: younger vs. older (< vs >36 years)
 - Prescription renewal: collected another Suboxone prescription from SM or another provider as reported by statewide Prescription Drug Monitoring Program (PDMP)



Emergency department visits in the year prior to vs. following Suboxone initiation

Total visits
OUD-related visits
Overdose-related visits

RESULTS

Of 134 patients receiving an MOUD prescription by the SM program, 115 patients were initiated on Suboxone by the SM team during the study period.

Table 1. Patient characteristics

	N (%)
Age range (years)	
18-25	5 (4%)
26-35	35 (30%)
36-45	45 (39%)
46-55	26 (23%)
55+	4 (4%)
Gender	
Male	68 (59%)
Female	47 (41%)
Prescription renewal source	
Street medicine program	16 (14%)
Other	35 (30%)
No renewal	63 (55%)
Missing	1 (1%)

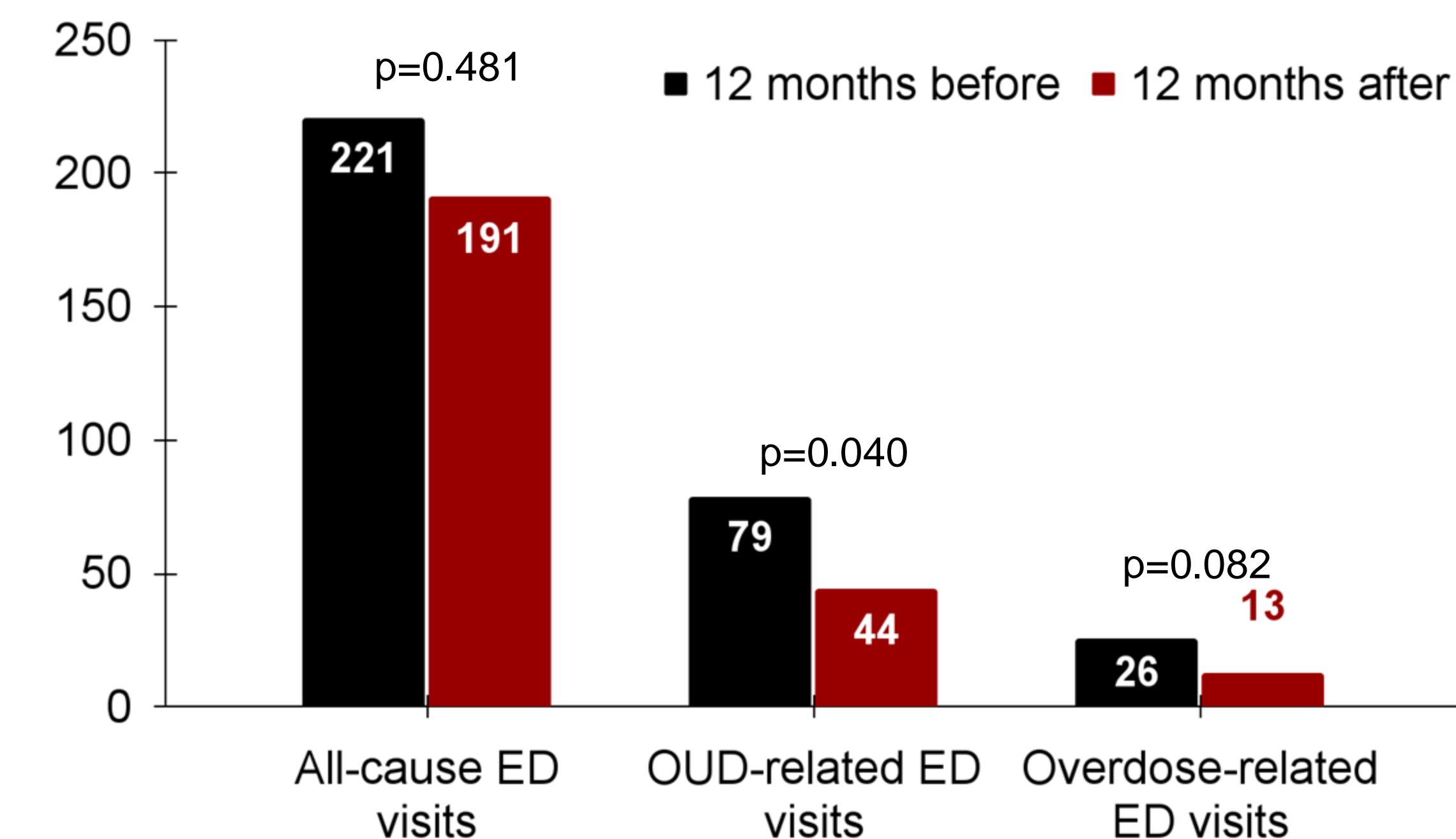


Figure 1. Cohort-level all-cause, OUD-related, and overdose-related ED Visits 12 months before vs. 12 months after SM-initiated Suboxone

In the 12 months prior to Suboxone initiation, this cohort accounted for 221 ED visits, of which 79 pertained to OUD-related chief complaints. In the year following medication initiation, cumulative ED visits declined to 191, of which 44 related to OUD – representing a significant decrease in visits specifically surrounding opioid use ($p < 0.05$) (Figure 1).

Table 2. Individual-level all-cause, OUD-related, and overdose-related ED Visits 12 Months before vs. 12 Months after SM-initiated Suboxone

	Median visits before N (IQR)	Median visits after N (IQR)	p value
All-cause	1 (0-3)	0 (0-2)	0.075
OUD-related	0 (0-1)	0 (0-0)	0.001*
Overdose-related	0 (0-0)	0 (0-0)	0.046*

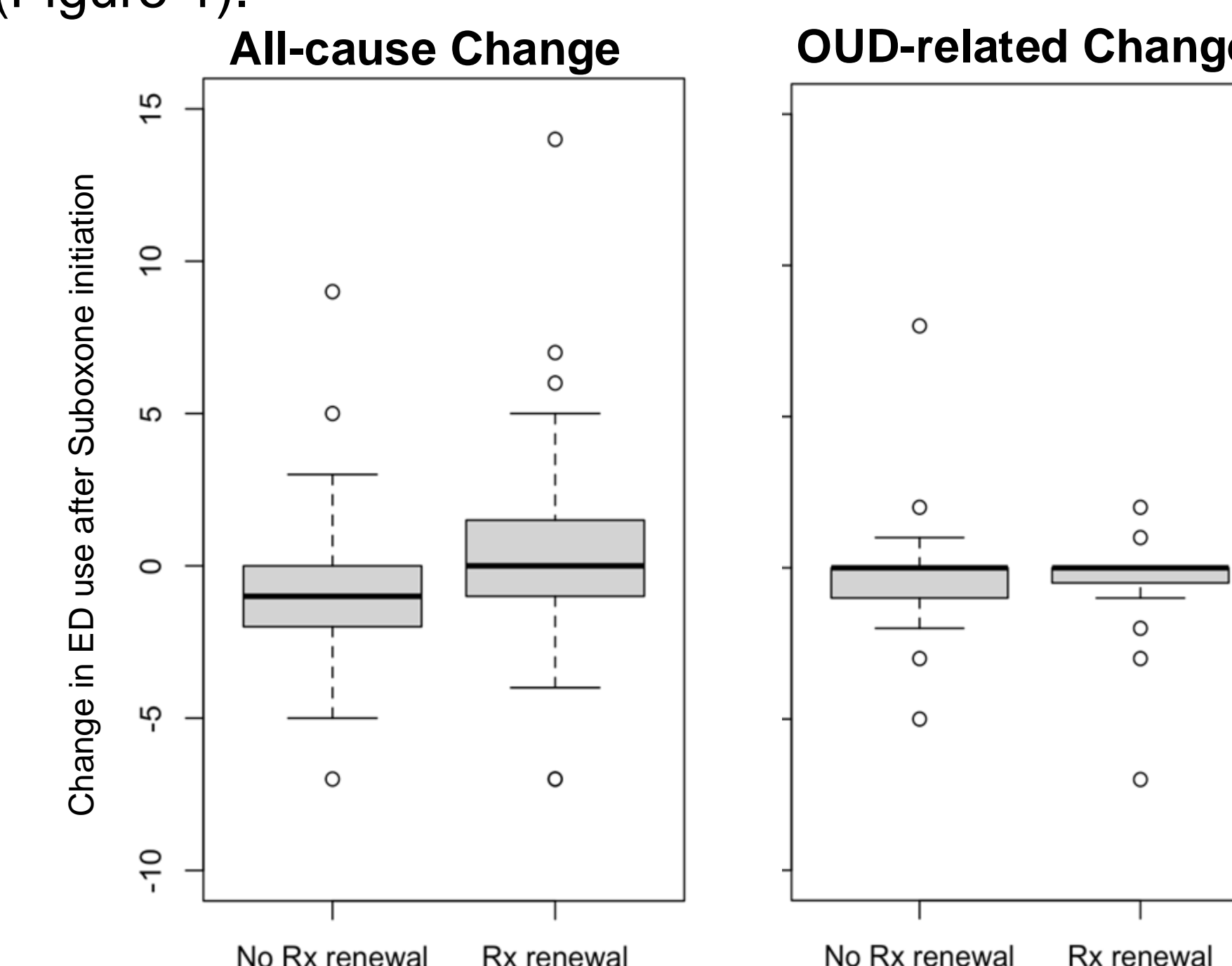


Figure 2. Change in all-cause and OUD-related ED visits before vs. after Suboxone initiation, comparing patients who did not renew Suboxone prescriptions those who renewed their prescription

There was no significant difference by age or gender in change in all-cause or OUD-related ED visits before vs. after SM-initiated Suboxone.

CONCLUSIONS

- We found a **significant reduction in OUD-related ED visits at individual and cohort levels**, suggesting that Suboxone initiation by a SM program may reduce OUD-related morbidity.
- There was **no significant change in all-cause ED visits** on individual or cohort levels suggesting that:
 - PEH have non-addiction-related health concerns for which they continue to need care
 - Starting Suboxone may improve access to and/or trust in the healthcare system
- **Patients who did not renew Suboxone prescription had more of a reduction in all-cause ED use** than those who did renew their prescription which may be explained by:
 - reduced access to care (e.g., return to use, incarceration, mortality)
 - poor tracking of access to care (e.g., moving populations across states, initiation of methadone, entry to residential program)

LIMITATIONS

Our study was limited by:



Evaluation of Suboxone only vs. other forms of MOUD



Evaluation of ED visits only vs. inpatient hospitalizations



Outliers in which high individual ED use influenced cohort-level results

ACKNOWLEDGEMENTS

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REFERENCES

