

# A Pilot Trial of Symptom-Triggered Alcohol Withdrawal Management Delivered over Telemedicine

Sloan, Matthew<sup>1,2,3</sup>; Xiao, Ke Bin<sup>1</sup>; Tang, Victor<sup>1, 2</sup>; Simpkin, Emily<sup>1</sup>; Ngoy, Anthony<sup>1,3</sup>; Bozinoff, Nikki<sup>1</sup>

<sup>1</sup>Centre for Addiction and Mental Health, Toronto, Ontario, Canada; <sup>2</sup>Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada;

<sup>3</sup>Department of Pharmacology and Toxicology, University of Toronto, Toronto, Ontario, Canada

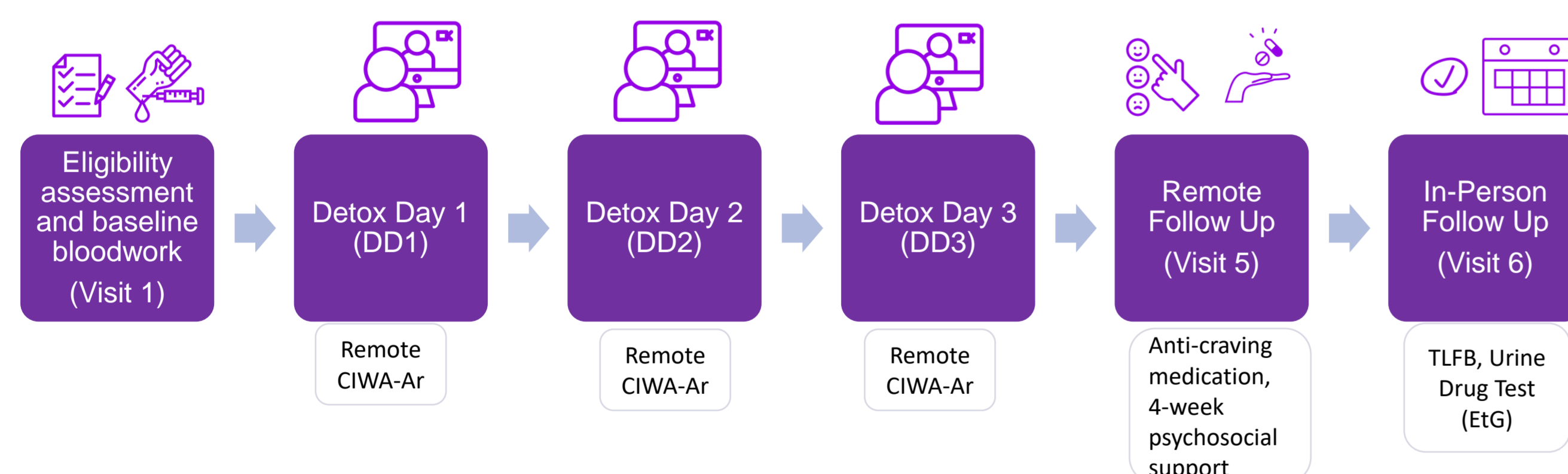
## Introduction

- Alcohol use is one of the most common causes of death and disability globally.
- Alcohol withdrawal management is often the first step in the treatment of moderate to severe alcohol use disorder (AUD)
- Alcohol withdrawal can be treated using symptom-triggered and fixed dose approaches, but symptom triggered approaches result in shorter duration of treatment and reduced benzodiazepine requirements (Holleck et al, 2019)
- However, access to symptom-triggered withdrawal management remains difficult for many patients as symptom-triggered management requires specific expertise and resources (e.g. access to hospital beds).
- This study sought to determine whether symptom-triggered alcohol withdrawal management could be delivered virtually to improve access to care

## Objectives

- Primary aims: determine the feasibility of remote alcohol withdrawal management
  - Retention in treatment (target:  $\geq 70\%$  rate of retention)
  - Transfer to a higher level of care (target:  $\leq 20\%$  rate of transfer to higher level of care)
- Determine patient satisfaction with remote alcohol withdrawal management
  - Client Satisfaction Questionnaire (CSQ-8<sup>®</sup>)
- Examine withdrawal severity (CIWA-Ar) and benzodiazepine requirements over the course of treatment.

## Methods



## Results:

Table 1. Demographics

	Male (N = 18)	Female (N = 12)
Age (Mean [SD])	45.1 (10.8)	42.4 (12.4)
Income (< 60,000, %)	50.0	18.1
Ethnicity ("White", %)	66.7	66.7
Marital Status (Married or Common Law, %)	44.4	33.3
AUDIT Score (Mean [SD])	30.4 (3.9)	29.2 (4.8)
TLFB drinks/day (Mean [SD])	10.4 (1.9)	6.3 (2.1)
PACS Score	21.4 (6.1)	24.6 (3.6)

## Primary Outcomes

- % of participants retained in treatment: **93.3%**
- % of participants requiring transfer to higher level of care: **0%**
- Satisfaction with treatment (mean CSQ-8 score [SD]): **30.9 (1.5)**

Figure 1. Peak CIWA-Ar Score During Each Treatment Day

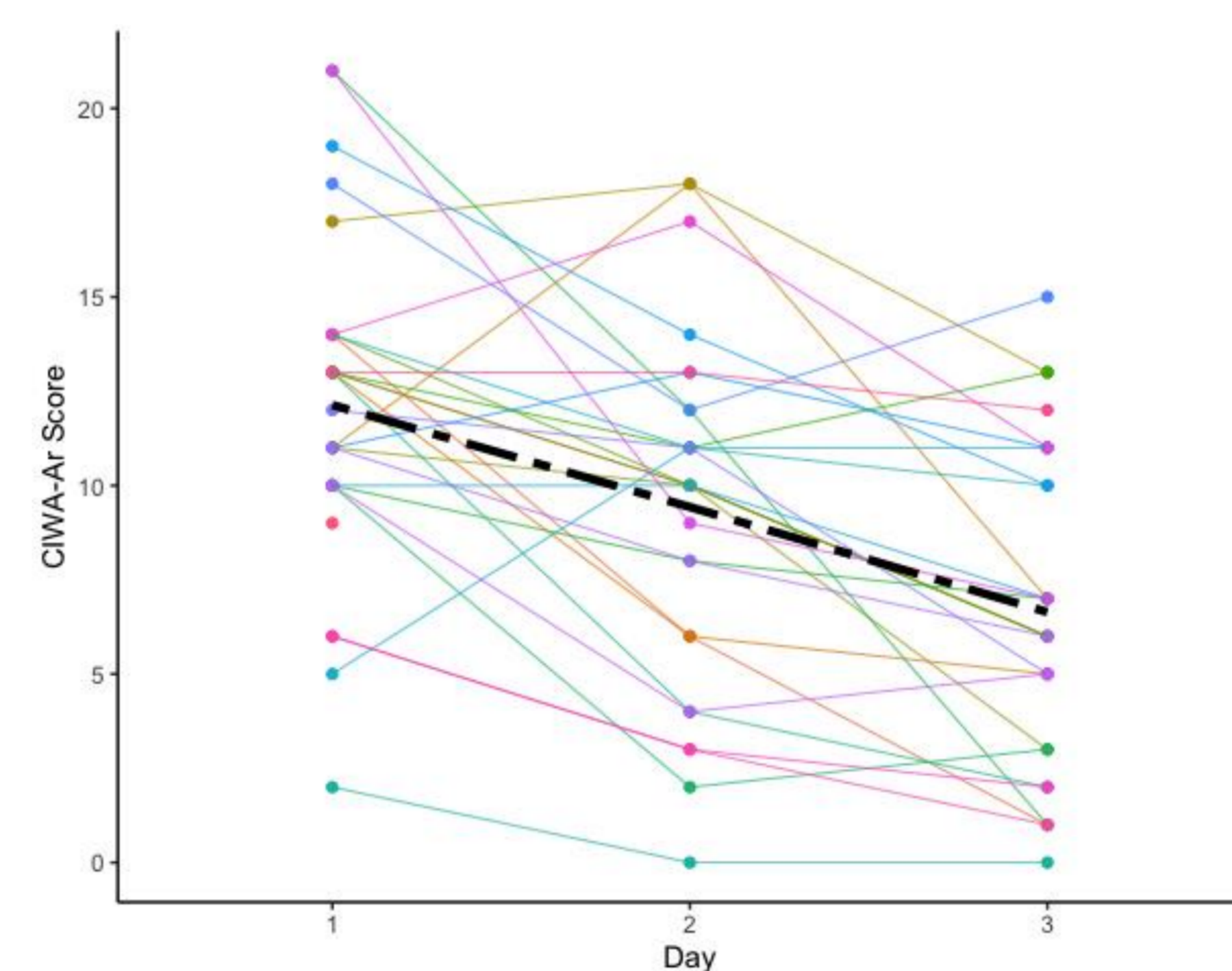
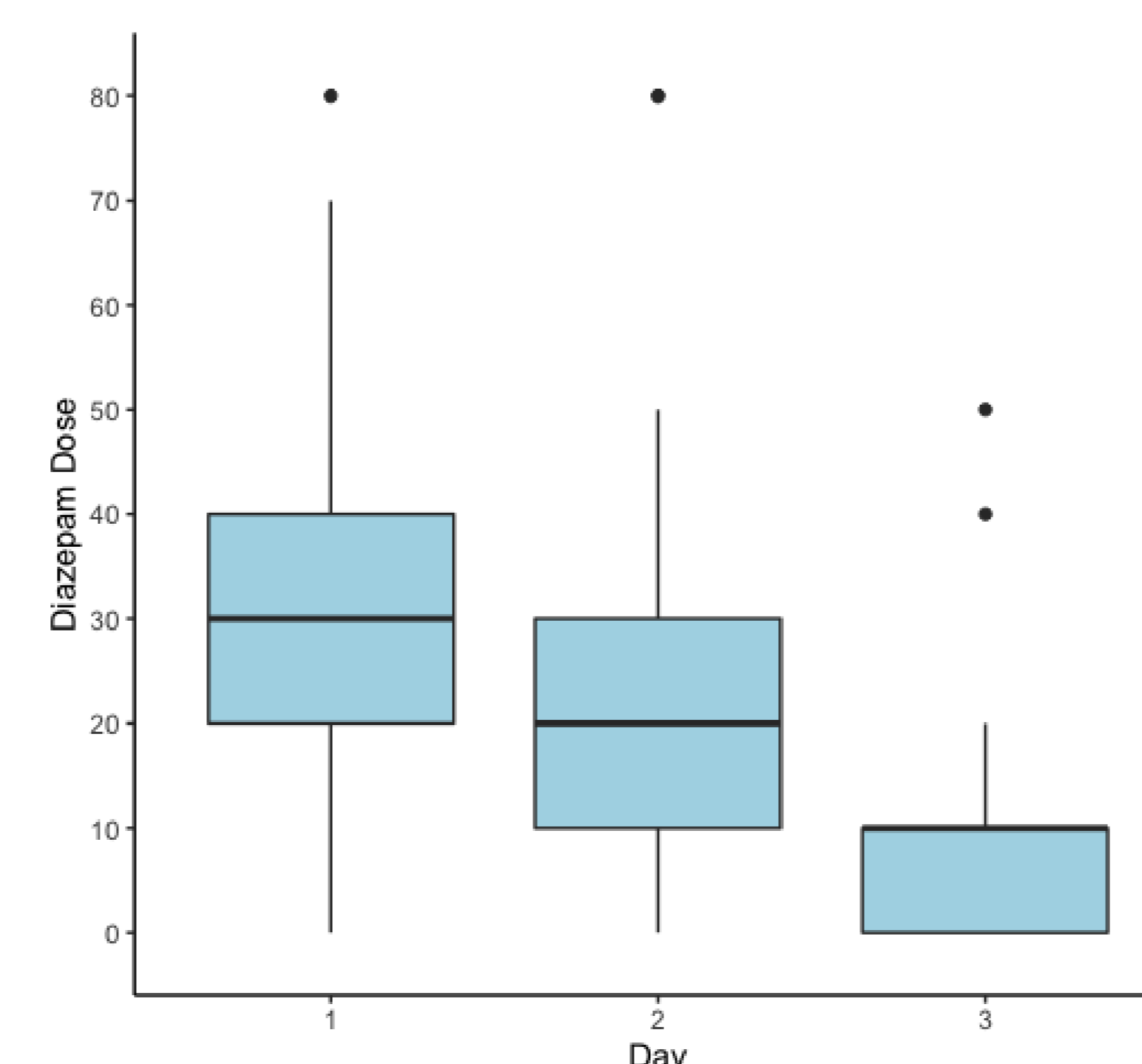
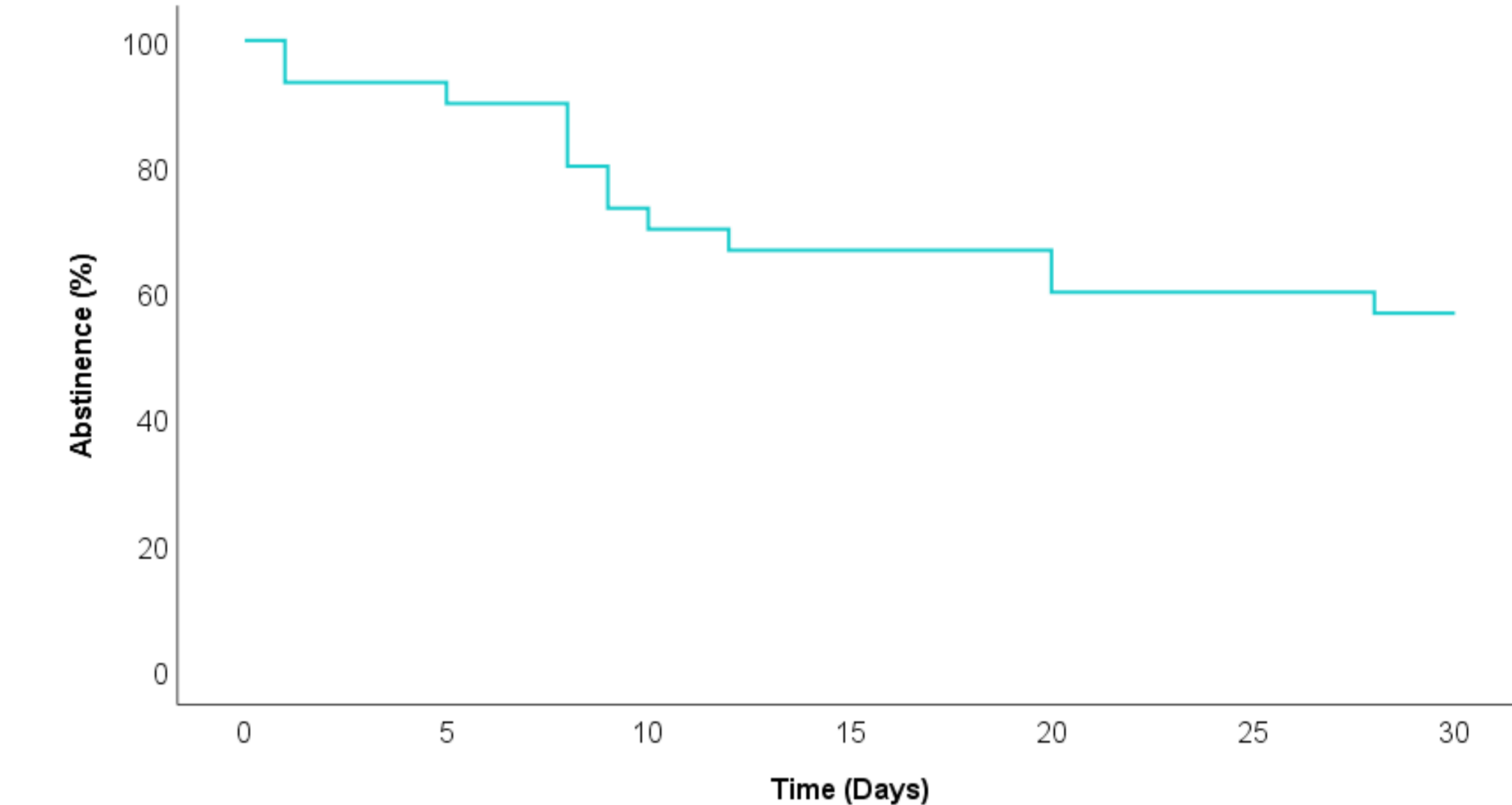


Figure 2. Diazepam Dose over Treatment



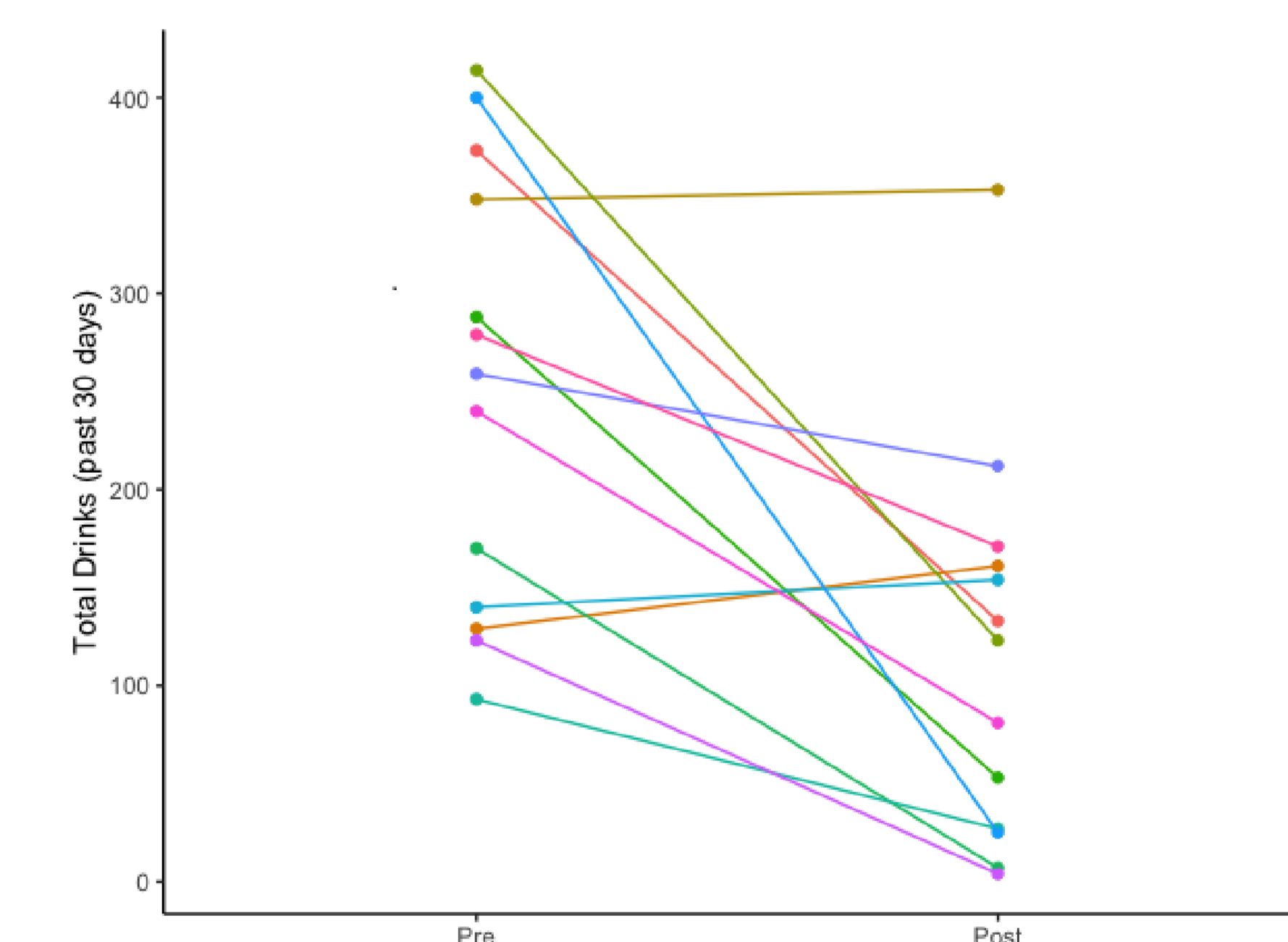
## Results:

Figure 3. Relapse Rates in the 30 Days Following Initiation of Detoxification



Relapse in the 30 days after treatment initiation: 43.3% relapsed (N = 13), 56.7% remained abstinent (N = 17)

Figure 4. Drinking Levels Before and After Treatment in Patients who Relapsed to Alcohol Use



## Conclusions

- Preliminary evidence from our pilot study suggests that symptom-triggered alcohol withdrawal management is feasible, with high rates of retention.
- No patients required transfer to a higher level of care.
- Rates of satisfaction with treatment were excellent
- Relapse rates after 30 days of care were acceptable and those who did relapsed reported lower amounts of consumption

## Funding

This study was funded by the Canadian Institutes of Health Research and the Ontario Ministry of Health and Long-term Care. Dr. Sloan is supported in part by an Academic Scholar Award from the Department of Psychiatry, University of Toronto.

## References

Holleck JL, Merchant N, Gunderson CG (2019). Symptom-Triggered Therapy for Alcohol Withdrawal Syndrome: a Systematic Review and Meta-analysis of Randomized Controlled Trials. J Gen Intern Med.