



A contingency management feasibility study of cannabis use in persons with HIV (PWH)

Baylor University

Chukwuemeka N Okafor, PhD, MPH; Steve Shoptaw PhD; Joy Schmitz PhD

BACKGROUND

- Cannabis use is common among PWH. Yet, definitive evidence on whether cannabis benefits or harms the health of PWH is limited.
- This is due in part to studies relying on self-reported cannabis use and cross-sectional designs.

STUDY OBJECTIVES

To determine:

- The feasibility of 28-days of monitored abstinence from cannabis use in PWH
- Whether cannabis abstinence/reduction is associated with depression, anxiety symptoms, inflammation, sleep, pain and HIV viral load.

GANTT CHART FOR STUDY

DESIGN

Day of follow-up	Measures	Intake evaluation	0 (Baseline)	3	5	7	14	21	28	42
Physical exam, medical history, psychiatric interview, cognitive evaluation, distress tolerance, risk assessment & Sociodemographic information	PE, SCID, DTS, RAB	x								
Urine specimen toxicology (6-drug panel)	--	x	x	x	x	x	x	x	x	x
Urine THCCOOH and CBD quantitation			x	x	x	x	x	x	x	x
Blood draw (for HIV and inflammation quantitation)	--		x					x		x
Tobacco, alcohol, and illicit drug use	FTND, AUDIT-C		x	x	x	x	x	x	x	x
Cannabis use	TLFB		x	x	x	x	x	x	x	x
Depressive symptoms	CESD		x	x		x	x	x	x	x
Anxiety symptoms	GAD-7		x	x		x	x	x	x	x
Cannabis withdrawal	CWS		x	x	x	x	x	x	x	x
Pain symptoms			x			x		x		x
Sleep symptoms			x			x		x		x
Adherence to ART			x					x		x

Note: THC= 11-nor-9-carboxy- Δ 9-tetrahydrocannabinol, CBD=cannabidiol; DTS=Distress Tolerance Scale; RAB=Risk Assessment Battery; Wk=week; TLFB=Timeline Follow back; CESD=Center for Epidemiologic Depression Scale; GAD-7=Generalized Anxiety Disorder; CWS=Cannabis Withdrawal Scale; AUDIT-C=Alcohol Use Disorder Identification Test; FTND=Fagerstrom Test for Nicotine Dependence., SCID=Structure Clinical Interview for DSM), PE=Physical Exam.

METHODS

- **Study design:** Single-arm feasibility study
- **Target sample size:** 45 PWH
- **Eligibility criteria:**
 - 18+ years of age,
 - Self-report weekly cannabis use
 - Positive UTOX for cannabinoids.
- **Intervention:** 28-day contingency management (CM) program. Participants will be provided with escalating financial incentives for study visit attendance and cannabis-negative urine samples
- **Primary endpoints:**
 - # Subjects enrolled
 - # Subjects completing the CM program
 - # Subjects achieving 28-days of sustained cannabis abstinence
- **Secondary endpoints:**
 - Depression and anxiety symptoms
 - Pain symptoms
 - Sleep
 - Inflammation
 - HIV viral load

SCHEMATIC OF STUDY DESIGN

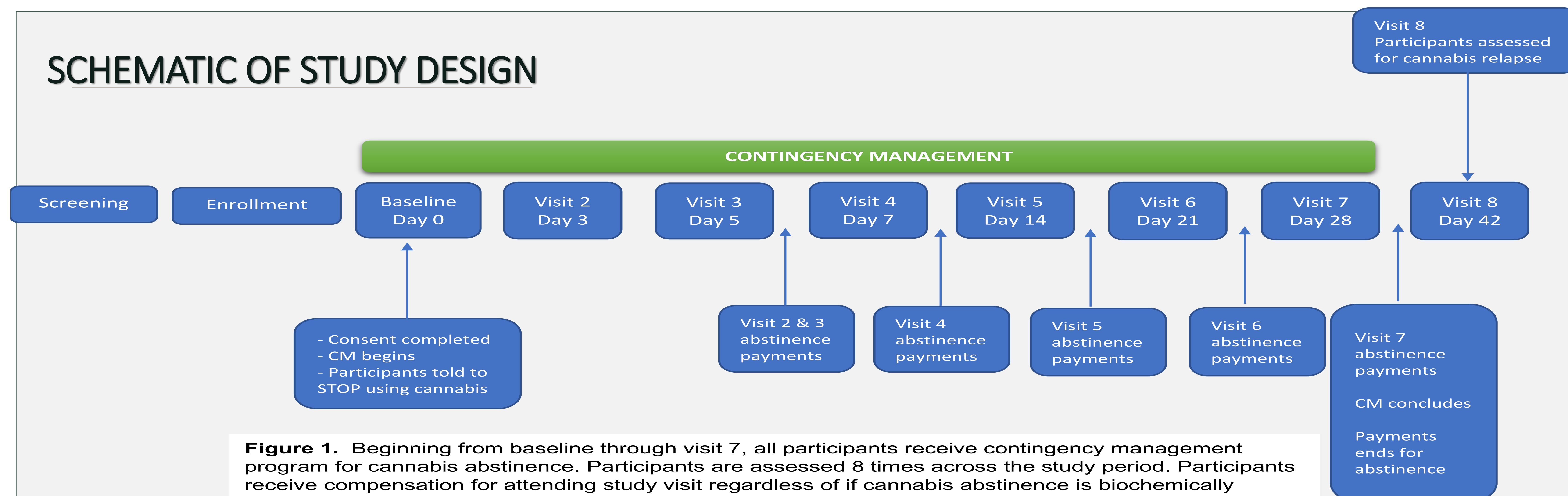


Figure 1. Beginning from baseline through visit 7, all participants receive contingency management program for cannabis abstinence. Participants are assessed 8 times across the study period. Participants receive compensation for attending study visit regardless of if cannabis abstinence is biochemically verified. Participants with biochemically verified cannabis abstinence receive compensation for attendance and attaining abstinence. Visit 8 will assess cannabis relapse after contingency management has being removed.

DISCUSSION

- This study will provide important feasibility data on enrolling and retaining PWH who use cannabis in a clinical study.

ACKNOWLEDGEMENTS

- Chukwuemeka N. Okafor is supported by the National Institute on Drug Abuse (K01-DA047912). The contents of this publication are solely the responsibility of the authors and do not represent the official views of the National Institutes of Health (NIH).
- ClinicalTrials.gov #: NCT04866004