



A Stepped Care, Peer-Delivered Intervention to Improve ART  
Adherence and SUD in Primary Care

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**GLOBAL MENTAL HEALTH**  
*and* **ADDICTION PROGRAM**



**National Institutes of Health**

# Motivation for Project Khanya

- 1/3 of people with HIV in SA have unhealthy alcohol or substance use
- Unhealthy use is associated with worse HIV treatment adherence
- Treatment of substance use is large provided outside of HIV care



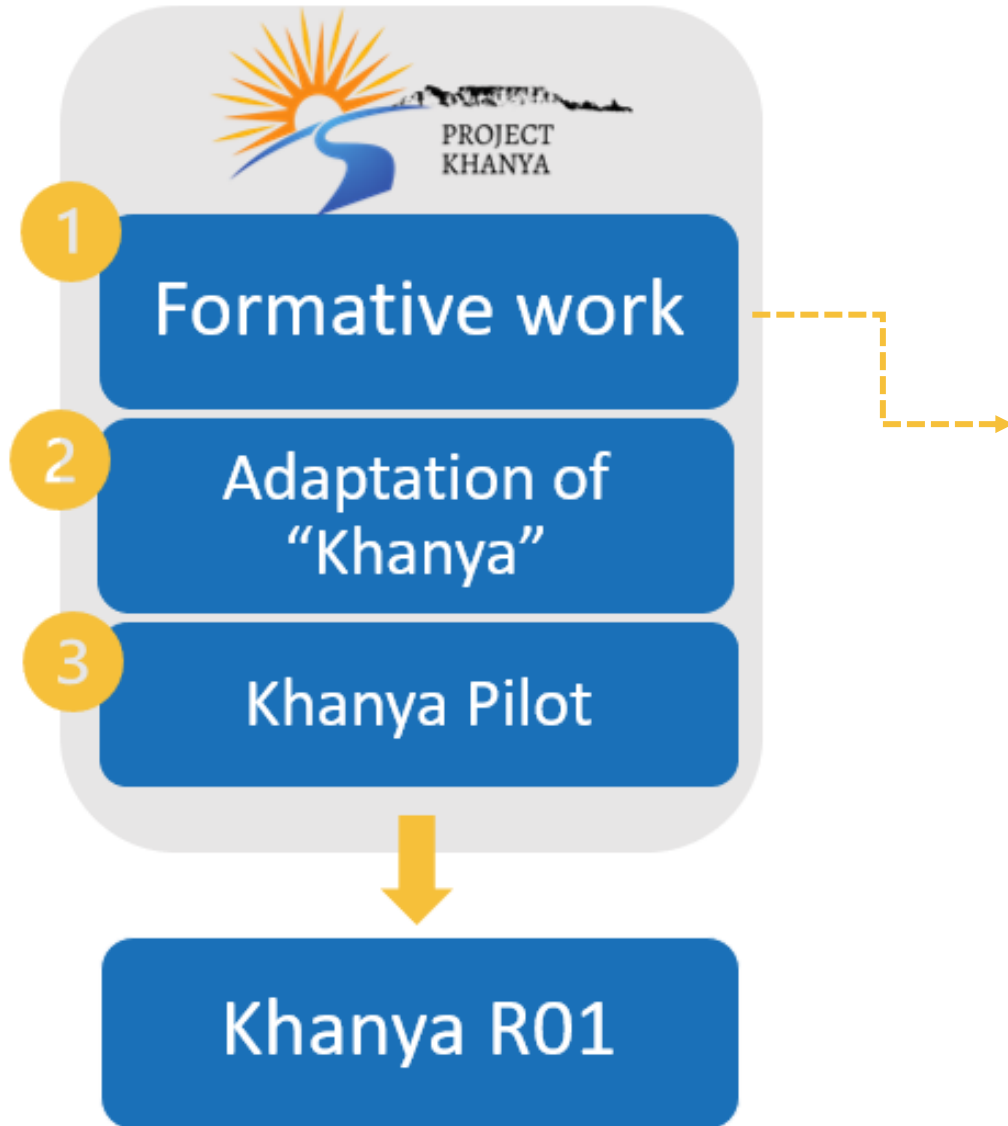
# Goal of Project Khanya

## ***Improve the health and HIV outcomes among people with HIV and substance use***

- Increase access to evidence-based interventions for HIV medication adherence and substance use
- Understand how to integrate substance use interventions into HIV care



## Patient Focused

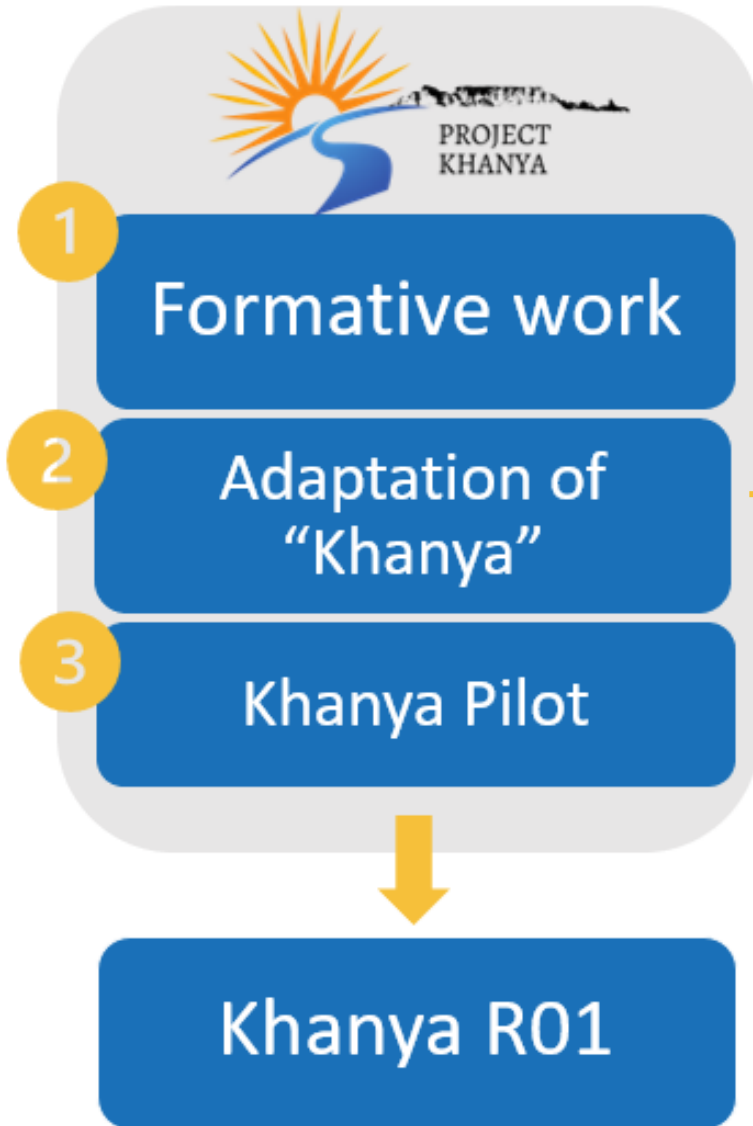


## Phase 1: Formative Work

*Key findings: Preference for a Peer, Stigma a Barrier*

- First step was to get feedback from patients, providers, other stakeholders (N=30)
  - **Three main findings:**
    - Overwhelming preference for a peer interventionist
    - Role of community health workers (CHWs) in detecting substance use
    - Lack of awareness of co-located SU treatment program

# Patient Focused



## Phase 2: Adaptation

*Adapted evidence-based intervention components based on formative work: “Khanya”*

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“Too Much Boredom Isn’t a Good Thing”: Adapting Behavioral Activation for Substance Use in a Resource-Limited South African HIV Care Setting

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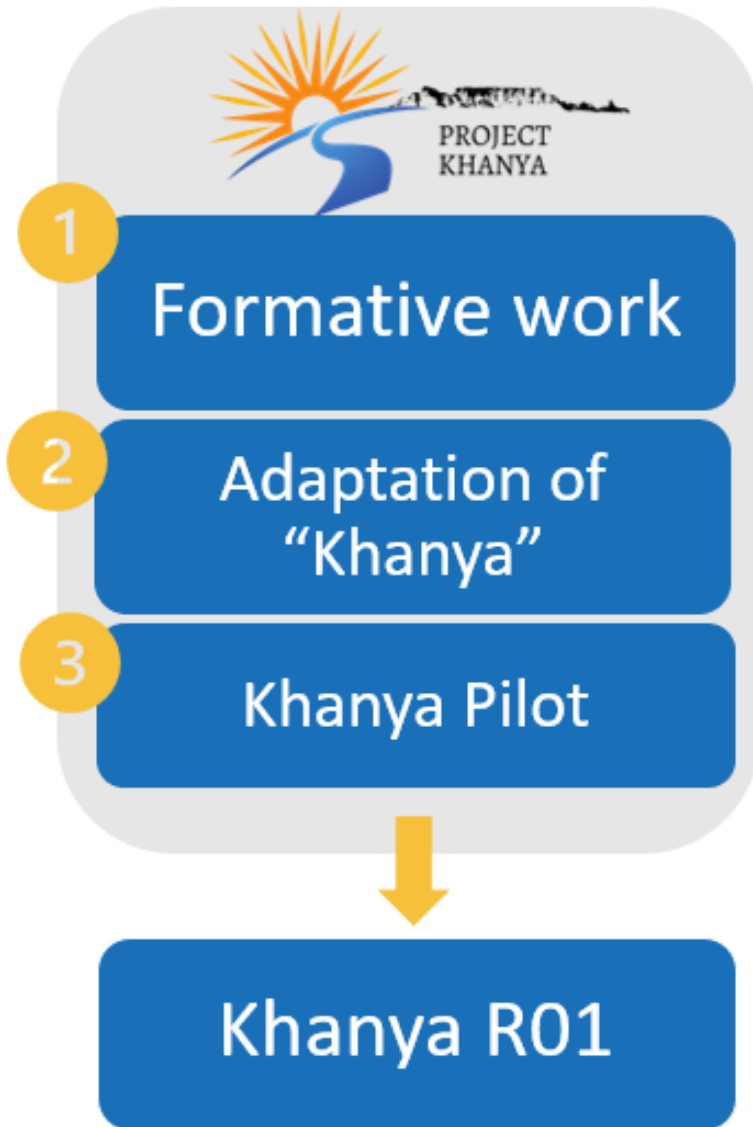
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# Patient Focused



## Phase 3: Khanya Pilot Trial

*Feasible, acceptable, and effective for improving HIV medication adherence and alcohol use among patients who use drugs*

The image shows a snippet of a journal article from the JIAS (Journal of the International AIDS Society). The header includes the JIAS logo, the journal title, an 'Open Access' badge, and a red AIDS awareness ribbon. The article title is 'Project Khanya: results from a pilot randomized type 1 hybrid effectiveness-implementation trial of a peer-delivered behavioural intervention for ART adherence and substance use in HIV care in South Africa'. The authors listed are Jessica F Magidson, John A Joska, Jennifer M Belus, Lena S Andersen, Kristen S Regenauer, Alexandra L Rose, Bronwyn Myers, Sybil Majokweni, Conall O'Cleirigh, and Steven A Safren. The publication date is 24 June 2021, and the DOI is https://doi.org/10.1002/jia2.25720. The article has 1 citation. The ClinicalTrials.gov identifier is NCT03529409, and the trial was registered on May 18, 2018. A dashed yellow arrow points from the 'Khanya Pilot' stage of the flowchart to this article snippet.

**JIAS** | JOURNAL OF THE INTERNATIONAL AIDS SOCIETY | Open Access |

Short Report | Open Access |

**Project Khanya: results from a pilot randomized type 1 hybrid effectiveness-implementation trial of a peer-delivered behavioural intervention for ART adherence and substance use in HIV care in South Africa**

Jessica F Magidson , John A Joska , Jennifer M Belus , Lena S Andersen , Kristen S Regenauer , Alexandra L Rose , Bronwyn Myers , Sybil Majokweni , Conall O'Cleirigh , Steven A Safren

First published: 24 June 2021 | <https://doi.org/10.1002/jia2.25720> | Citations: 1

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# Khanya Pilot trial

*Feasible, acceptable, and effective for improving HIV medication adherence and alcohol use among patients who use drugs*



## Demographics



<b>54.1%</b>	<b>100%</b>	<b>21%</b>	<b>37</b>	<b>92%</b>
Female	isiXhosa speaking	Some employment	Average Age	Retention Rate

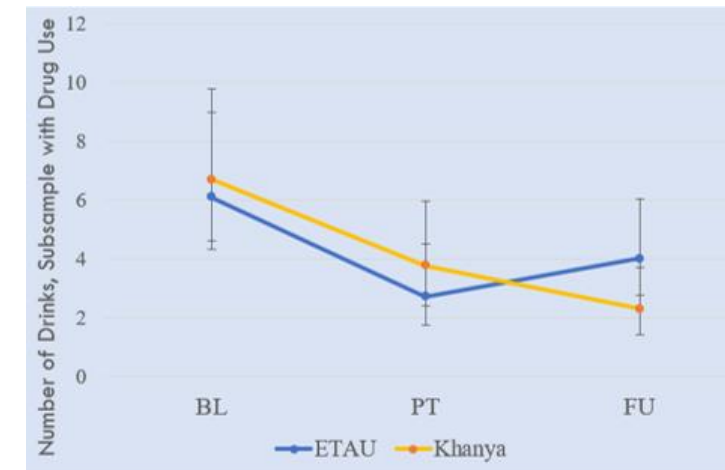
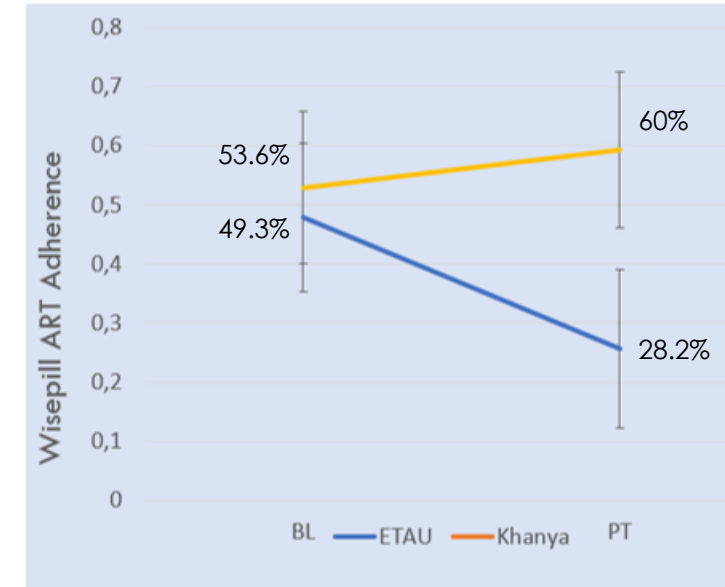
Sample	
<b>61</b>	Total
<b>30</b>	Khanya
<b>31</b>	ETAU

## Key findings

- Khanya was **highly feasible, acceptable, and delivered with >90% fidelity by peer**
- Significant increases in ART adherence in Khanya vs. ETAU
- Significant reductions in alcohol use in sample who used other drugs vs. ETAU (n=21)
- Significant increases in employment in Khanya vs. ETAU at 6-months (**61% vs. 34%**)

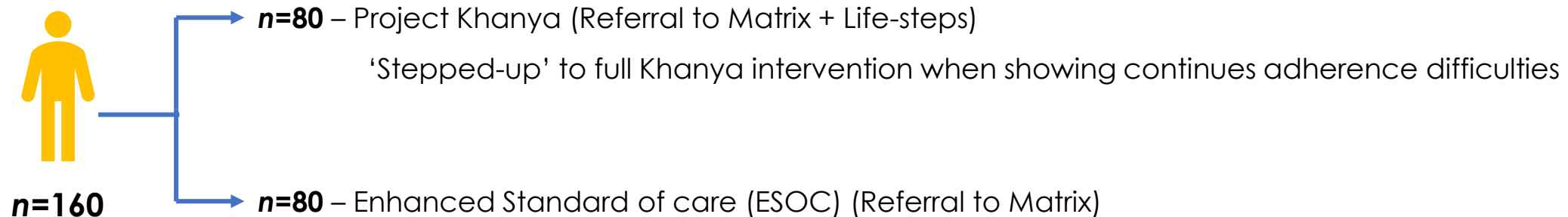
*"Now, I have a picture of a house that is tumbling down or it has been demolished. That's how my life was. And then when I came to Khanya it's like ... this house [has] been built from foundation up. And that is my experience from the therapy."*

– 36 year old, male



# R01: Project Khanya

- **A stepped care, peer-delivered intervention to improve ART adherence and SUD in primary care**
  - Aim 1: Effectiveness outcomes over 12 months
  - Aim 2: Implementation outcomes
  - Aim 3: Cost of implementation and sustainability
- **Recruit from 4 clinics in Khayelitsha → co-located SUD treatment program**
- **Eligibility:** ≥18 years; HIV positive and on ART; at least moderate SU; risk of virological failure (re-engaging in care after ≥ 1 month of being out of care; ≥ 1 episode of VL >400 copies/mL; on 2nd or 3rd line ART)

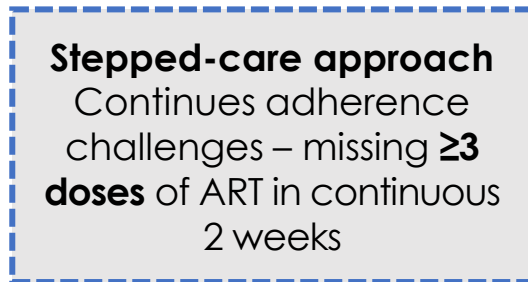




# R01: Project Khanya

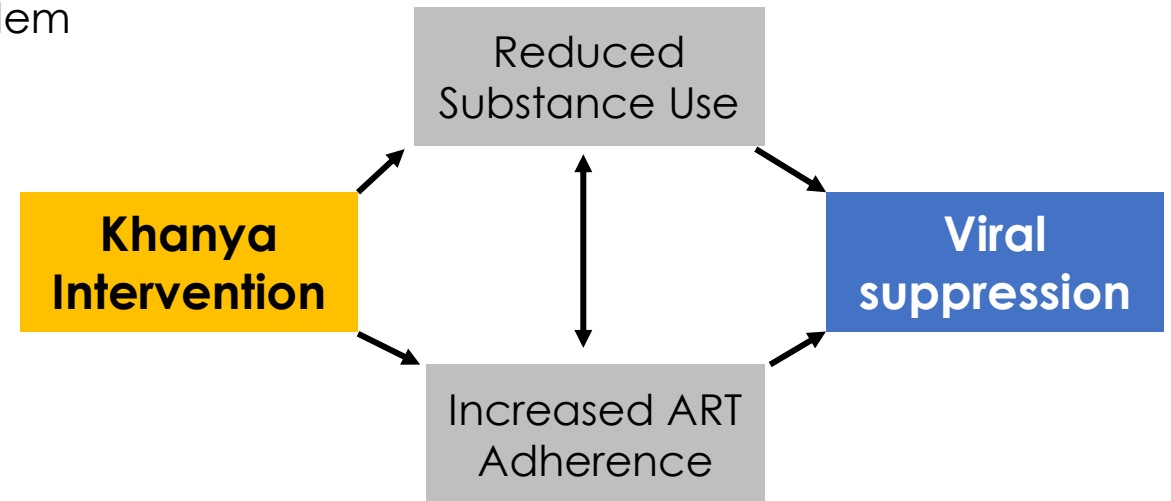
## Step 1: Life-Steps

- Strategies for taking ART while using substances
- Minimize harms from SU that interfere with HIV care
- Based on CBT and more specific principles of problem solving therapy



## Step 2 Full Khanya Intervention

- Second dose of Life-Steps
- 5 additional sessions based on: behavioural activation; problem solving; mindfulness; relapse prevention
- 6 Optional booster sessions





# R01: Project Khanya

## **Session 1: Life Steps for Adherence**

Goals for adherence; Barriers to adherence; Plan for overcoming barriers

## **Session 2: Behavioural Activation for Substance Use**

Setting healthy goals for alcohol/drug use; Overview of behavioural activation; Behavioural monitoring

## **Session 3: Behavioural Activation for Substance Use**

Review behavioural activation, Life areas and Values Exercise; Activity scheduling (positive events)

## **Session 4: Mindfulness-based relapse prevention**

Introduction to mindfulness; Mindfulness in daily life; Recognising urges/cravings

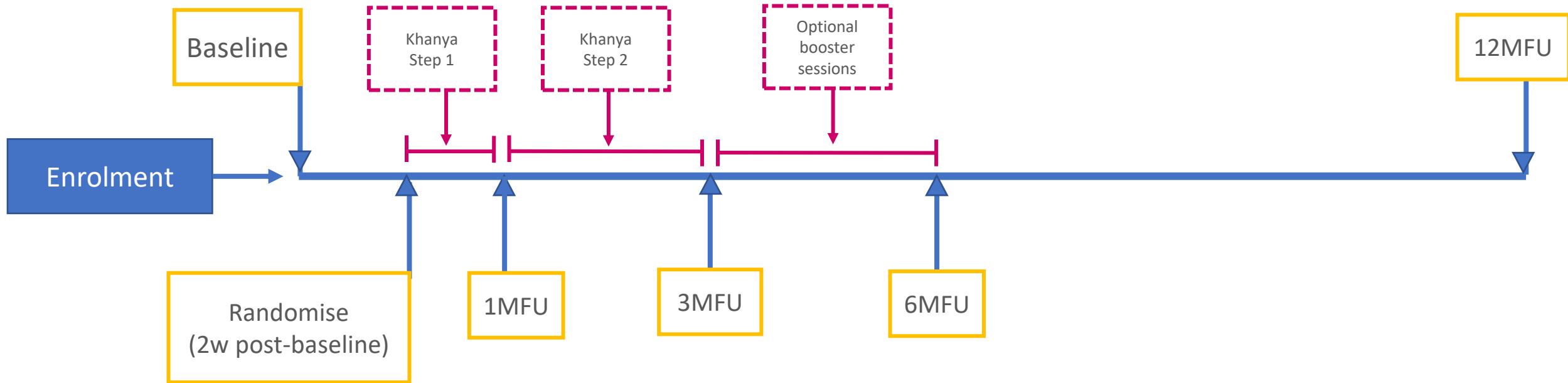
## **Session 5: Relapse prevention**

Identifying high-risk situations; Identifying skills to respond to high-risk situations

## **Session 6: Relapse prevention**

Maintaining gains/relapse prevention; Review skills from intervention; Plan for continued practise

# Timeline





# Outcomes

## HIV Medication Adherence

**Wisepill** - Real-time, wireless, electronic adherence monitoring device used to assess ART adherence

**Dried Blood Spots (DBS)** – Confirm that at least some recent ART is present in the system

## Substance use

**Biological measure** of substance use - (Urinalysis & PEth test)

**WHO-ASSIST** – Screens for Alcohol, Smoking, and Substance involvement

## Reach and Uptake

**Attendance and retention of participants** – Session attendance and drop-out rates

**Semi-structured interviews** – 30 qualitative interviews to assess perceptions, barriers and facilitators to uptake

## Implementation Fidelity

**Rating checklist** – to assess peer interventionist adherence to treatment components

## Cost effectiveness

**Drug abuse Treatment Cost Analysis Program (DATCAP)** – tool to capture intervention resources in multiple settings for the purpose of estimating costs



# PROJECT KHANYA

THANK YOU!



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