

INTRODUCTION

- Despite progress toward HIV epidemic control, viral suppression (VS) within the pediatric population remains suboptimal globally. In Haiti, for many reasons, VS rates for children living with HIV (CLHIV) remain at 76% (FY23Q4, DATIM Report), highlighting the urgent need for more effective interventions to improve adherence to antiretroviral therapy (ART) and case management, particularly for unsuppressed CLHIV.
- To address these low CLHIV VS, the ALESIDA2 project implemented by Catholic Medical Mission Board (CMMB) under an established partnership with 22 healthcare institutions in 7 departments in Haiti introduced the “optimized care package” for CLHIV with detectable viral load (VL).
- The purpose of this operational research is to investigate how the optimized package contributed to CMMB’s 88% VS among CLHIV.

OBJECTIVES

- Primary Objective:** Compare viral suppression rates between unsuppressed CLHIV who benefited from the optimized care package and those who received the standard care package recommended by *Programme National de Lutte contre le SIDA/Ministère de la Santé Publique et de la Population* (PNLS/MSPP; Haiti’s national AIDS program in its ministry of health) between October 2022 and September 2023.
- Secondary Objective:** Evaluate suppression levels based on the degree of optimization applied during the study period (“standard care package” +1, +2, or +3 interventions).

METHODOLOGY

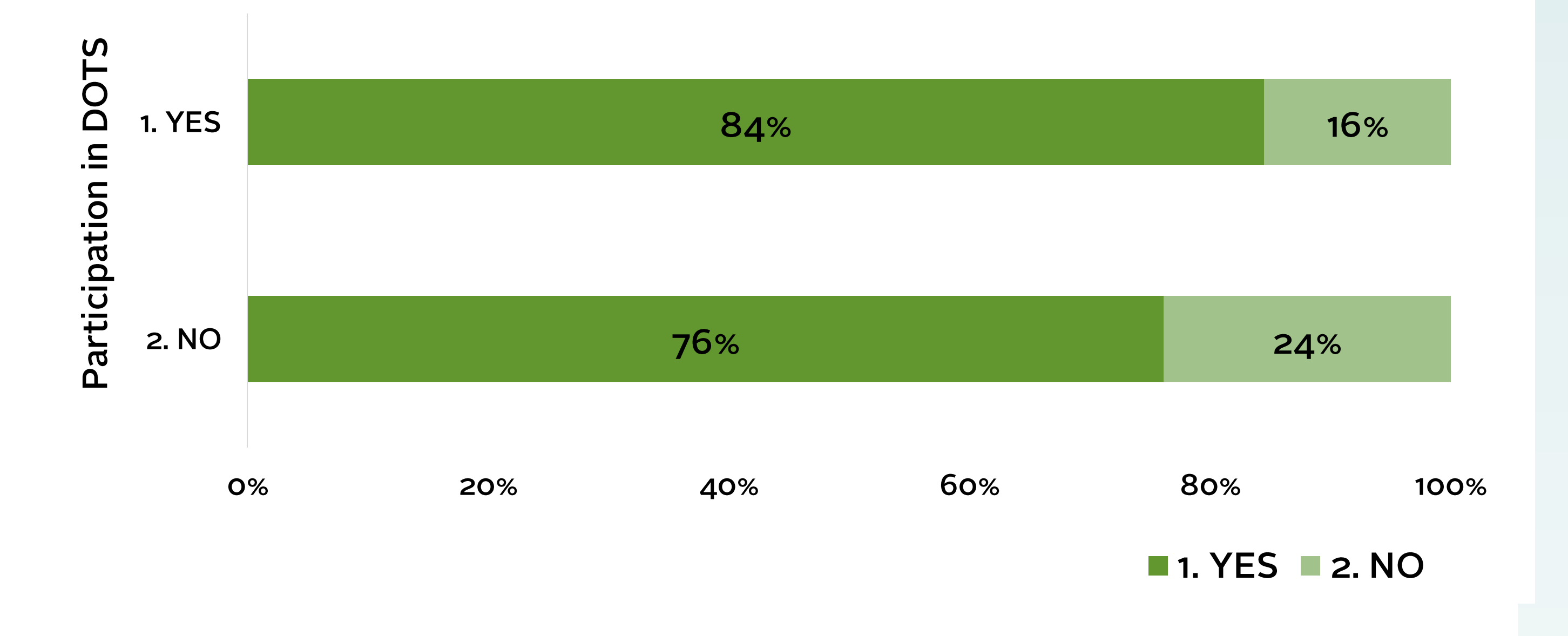
- To tackle adherence issues at facility and community levels, the CMMB technical team developed an optimized care package of strategies to create a more pediatric patient–centered approach. These strategies were then added to the standard care package.
 - The standard care package for unsuppressed HIV-positive children* includes individual enhanced adherence counseling (EAC), psychosocial support, and clinical evaluation. These interventions are implemented within six months of identification of a detectable viral load.
 - The optimized care package* comprises the standard care package plus at least one other intervention developed and implemented by CMMB: directly observed therapy (DOTS), HIV status disclosure for preteens, viral load classes.
- The research team used a mixed methods approach, combining quantitative and qualitative data. A cohort analysis was conducted using secondary patient-level data obtained during routine pediatric care. Quantitative data were extracted from EMR (specifically, Haiti’s iSanté+ database) and from pediatric registers and other site-level tools. The extracted information concerned unsuppressed HIV-positive children under age 15 years who had received care during the study period in ART clinics CMMB Haiti’s ALESIDA2 project network.
- Quantitative data extracted were entered into data collection forms developed on LogAlto, CMMB’s proprietary database; it can be used to collect data both online and offline and cleaned simultaneously. The cleaning process involved de-identifying data, checking for duplicates, and replacing null values.
- The qualitative research involved in-depth interviews with 11 healthcare providers, selected purposively from high- and low-volume facilities. Interviewers used a semistructured guide to gather insights. These data were collected via MS-Teams and analyzed using a mix of directed, conventional, and summative content analysis approaches. The ATLAS TiA AI function was used to code the data, combining AI-generated codes with human for accuracy and applicability.

FINDINGS

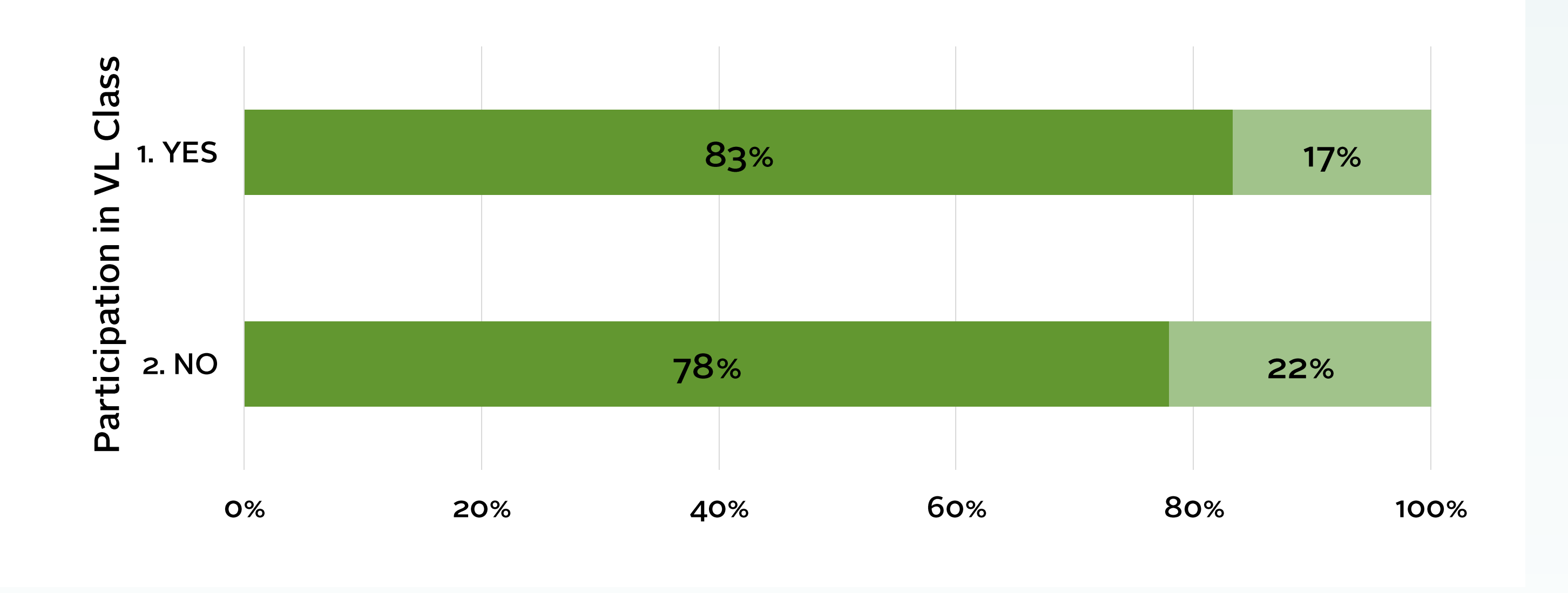
CATEGORY	STANDARD PACKAGE	OPTIMIZED PACKAGE	TOTAL
SEX			
Female	10	61	71
Male	5	49	54
AGE GROUP			
<1 year old	0	10	10
1–4 years old	3	21	24
5–9 years old	9	25	34
10–14 years old	3	54	57
RESIDENCY AREA			
Urban	1	39	40
Rural	14	71	85
COMORBIDITIES			
Yes	1	8	9
No	14	71	85
CAREGIVER			
Biological parent (mother/father)	9	73	82
Family member	4	32	36
Other	2	5	7
INTERVENTIONS			
Psychosocial assessment and support (YES)	68	41	109
DOT beneficiary (YES)	0	58	58
Viral load class (YES)	0	65	65
Status disclosure (YES)	0	38	38
Standard package + 2 interventions	0	55	55
Standard package + 3 interventions	0	20	20

The analysis included 125 unsuppressed CLHIV (43.2%F, 56.8%M; 52.80% aged 10–14; 68% rural; 92.8% without comorbidities). Of caregivers, 73.6% were biological parents, 20.8% other family members. 12% of the study group received the standard package, 88% the optimized. Only 60% of standard package recipients were suppressed at study conclusion, compared to 85.45% of optimized package beneficiaries.

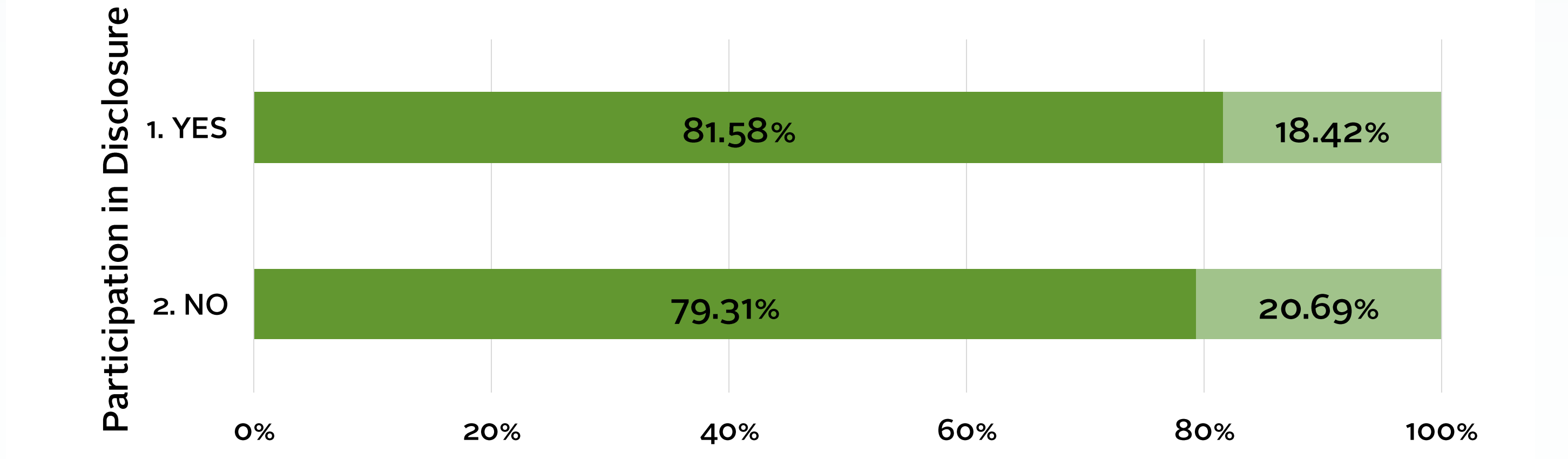
DOT Exposure and Viral Suppression Rates



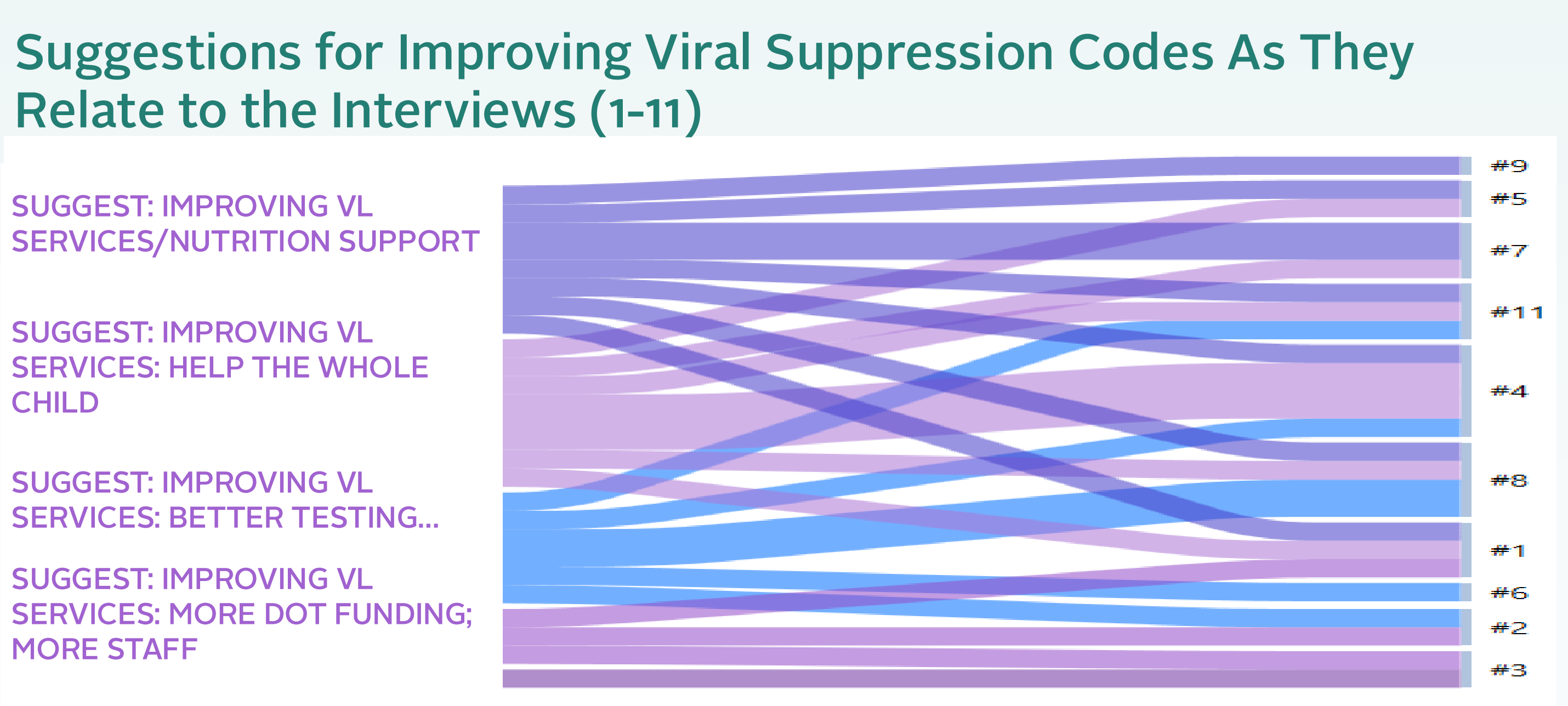
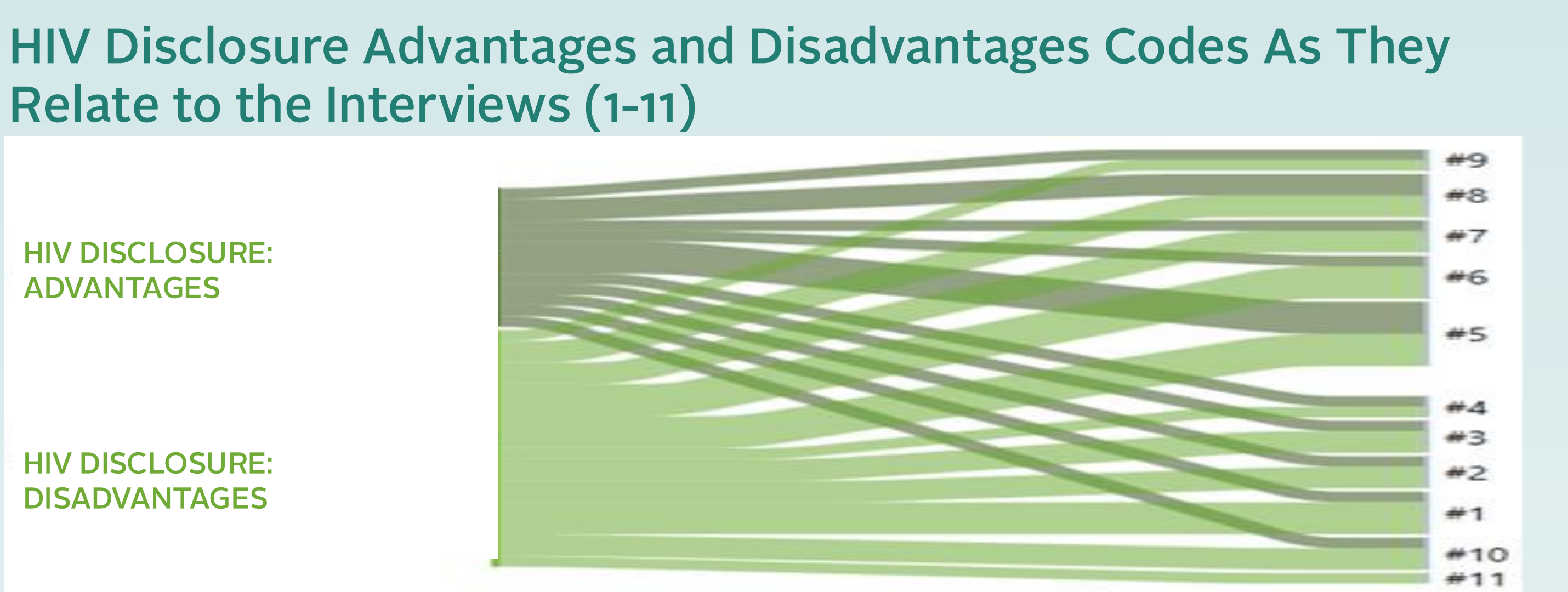
Viral Load Class Participation and Viral Suppression Rates



HIV Status Disclosure and Viral Suppression Rates



FINDINGS



CONCLUSION

The ALESIDA2 optimized care package has shown significantly higher VS among initially unsuppressed CLHIV compared to standard care. Success stories, general revelations about improved VS, and positive caregiver reactions—elicited in interviews—highlighted the optimized package’s impact. Interventions emphasizing group interactions, adherence reinforcement, and patient engagement in care are key to improve viral suppression toward epidemic control.