

PUTTING THE HEART BACK INTO HAART: GREATER HCP-PATIENT ENGAGEMENT IS ASSOCIATED WITH BETTER HEALTH OUTCOMES AMONG PERSONS LIVING WITH HIV (PLHIV) ON TREATMENT

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Background

- While in many settings HIV care involve fewer face to face appointments, a greater movement pushes toward achieving the UNAIDS 90-90-90 targets¹
 - In this context, optimizing the relationship between healthcare provider (HCP) and patient is critical
- In addition, inclusion of a fourth "90" target is intended to ensure that 90% of all people living with HIV (PLHIV) have good health-related quality of life (QOL)¹
- Today there is increasing recognition by HCPs to work towards achieving the fourth 90 as an added marker of treatment success beyond virologic control
- We investigated healthcare provider (HCP)-patient communication and engagement and explored associations with indicators of Quality of Life and health outcomes among PLHIV

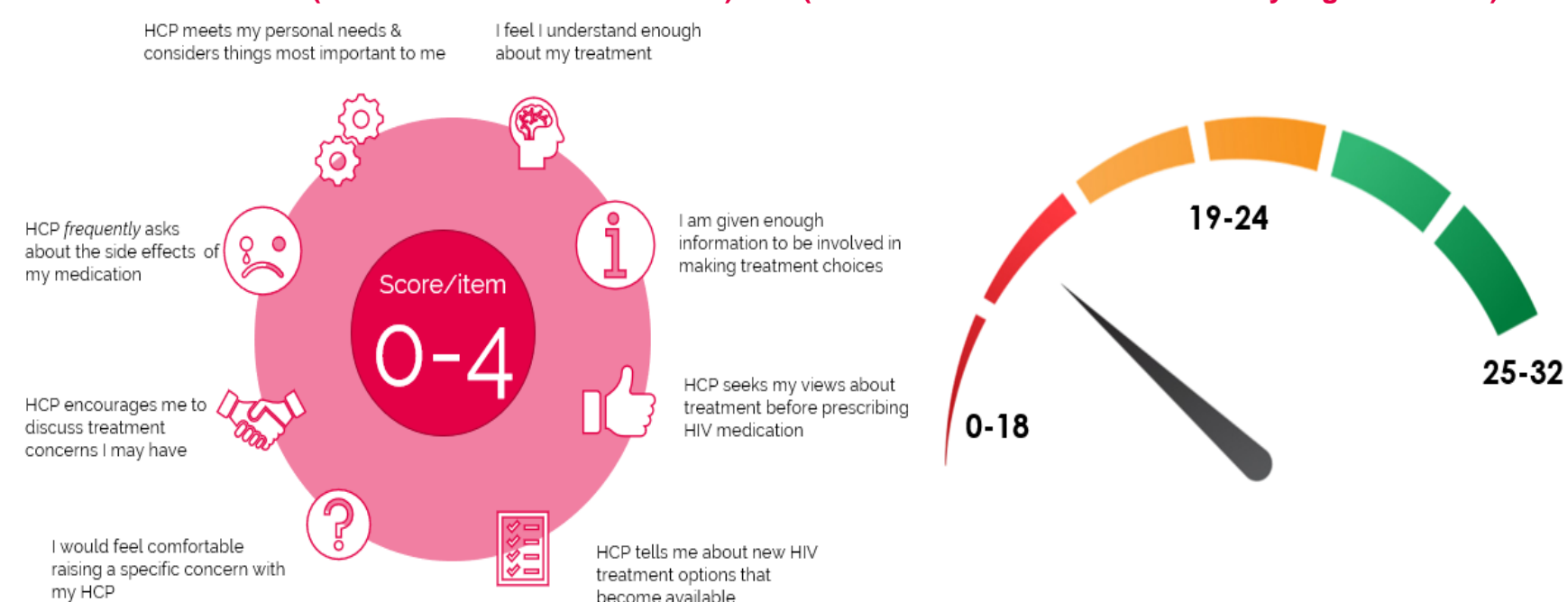
Methods

- We analyzed data from the 2019 Positive Perspectives Survey of PLHIV in 25 countries (N=2389)²
- This was a web-based survey conducted between April 2019 and January 2020 to capture attitudes, perceptions, and knowledge about antiretroviral therapy (ART)
 - An advisory committee comprising PLHIV, PLHIV advocacy groups, and HCPs helped identify key themes
- A combination of different non-probability-based sampling approaches was used to recruit participants, including snowball sampling, targeted sampling within Patient Advocacy Groups, Patient Support Groups or HIV Charities; and use of existing panels of PLHIV
- Surveyed participants were from North America (N=520), Europe (N=1119), Latin America (N=221), Asia (N=230), Australia (N=120), and South Africa (N=179)
- Inclusion criteria were as follows:
 - Male or female, aged 18 to 84 years, and willing and able to provide electronic/verbal informed consent to participate
 - Self-identify as having been diagnosed by a doctor or other HCP as being HIV seropositive, and currently on ART
 - Resident of selected country and be able to communicate in the language with which the survey is being administered

Key Measures and Approach

- Participants were asked, "What is your most recent viral load?"
 - Those answering "undetectable" or "suppressed" were classified as reporting viral suppression; those answering "detectable" or "unsuppressed" were classified as reporting being virally unsuppressed; and those answering, "I don't know" or "prefer not to say" were classified as indeterminate status
- Participants were classified as fully (100%) adherent if they did not report missing ART for even one time in the past month
- Individuals diagnosed with HIV for 2 years or longer before the survey were classified as being treatment experienced
- Patient engagement in care (low, moderate, high), was measured based on a modified version of the Observing Patient Involvement scale³
- Data were analyzed using descriptive and multivariable techniques
- Figure 1 illustrates the 12-item Observing Patient Involvement scale

Figure 1. Modified From the Observing Patient Involvement (OPTION) Scale, a 12-Item Scale Where Each Item Is Scored Between 0 (the Behavior Is Not Observed) to 4 (the Behavior Is Exhibited to a Very High Standard)



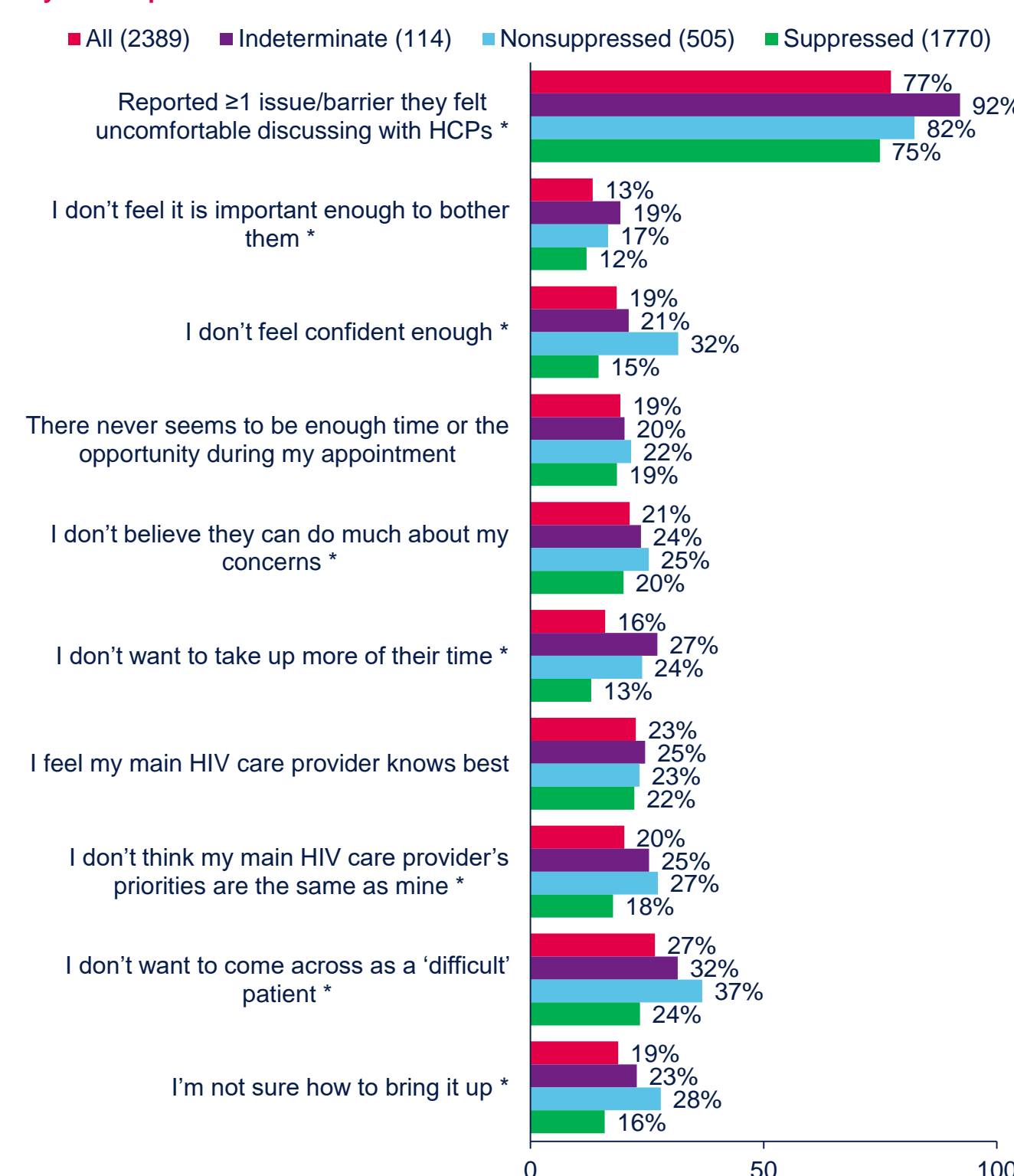
Results

- Most of the study population reported being virally suppressed (74%); younger (<50 y, 71%); men (68%); and diagnosed prior to 2017 (77%); Table 1
- Figure 2 details perceived communication barriers by PLHIV of HCPs by viral load status

Table 1. Characteristics of the Study Population (N=2389)

Variable	Categories	Distribution
Self-reported virologic status	Indeterminate (114)	5%
	Nonsuppressed (505)	21%
	Suppressed (1770)	74%
Age	<50 (1690)	71%
	50+ (699)	29%
Gender	Men (1623)	68%
	Other gender (70)	3%
	Women (696)	29%
Sexual orientation	Heterosexual (984)	41%
	Homosexual (1094)	46%
	Other sexual orientation (311)	13%
Year of HIV diagnosis	2017 to 2019 (548)	23%
	2010 to 2016 (913)	38%
	Pre-2010 (928)	39%
Region	Northern America (520)	22%
	Europe (1119)	47%
	Latin America (221)	9%
	Asia (230)	10%
	Australia (120)	5%
	South Africa (179)	7%

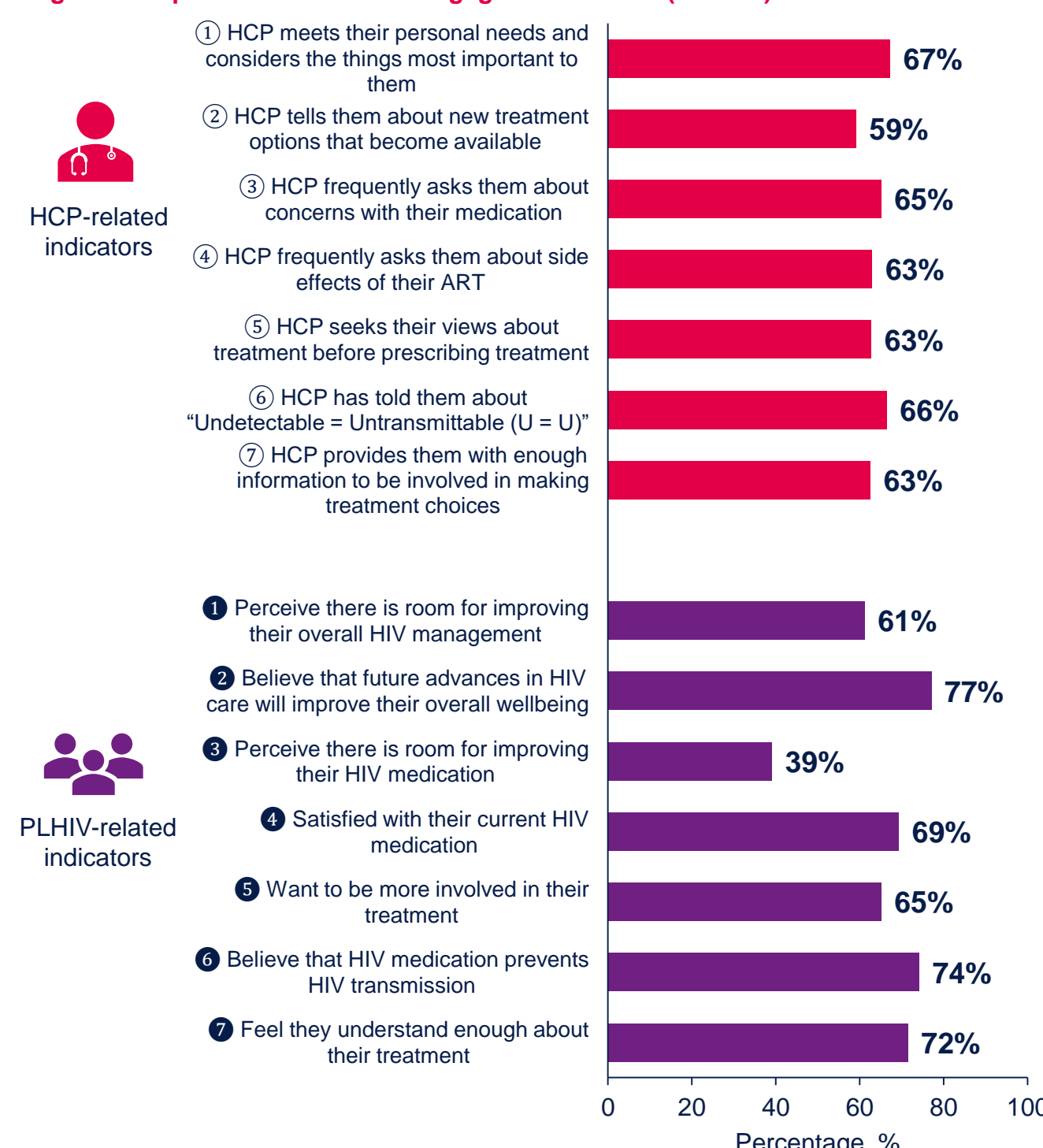
Figure 2. Perceived HCP Communication Barriers Reported by PLHIV, by Self-Reported Viral Load Status



*P<0.05.

- Those not virally suppressed were the most likely to report barriers
- Overall, 68% had shared their HIV status with a family doctor not providing HIV care, and this was higher among those virally suppressed (72%) than either those non-suppressed (57%) or with indeterminate status (51%)
- Figure 3 illustrates indicators of engagement in care

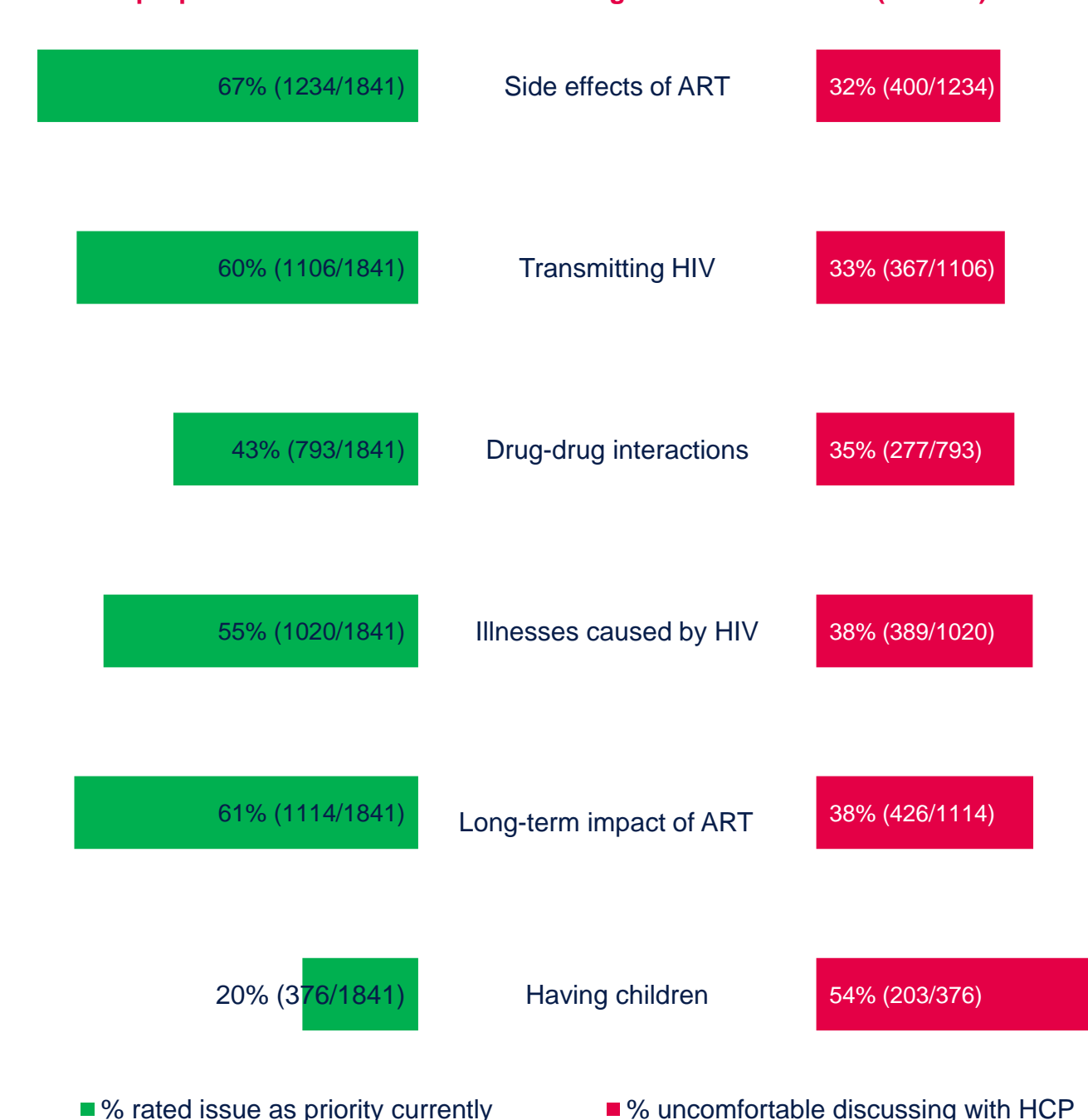
Figure 3. Reported Indicators of Engagement in Care (N=2389)



- 59% were updated on new treatment options
- 63% reported their HCP asked their views before new treatments
- 72% reported they understood their HIV treatment
 - However, 65% still wanted more involvement

- The top issues considered treatment priorities among those diagnosed for ≥2 years were concerns regarding (Figure 4):
 - ART side effects (67%) and
 - Long-term impacts (60.5%)
 - Transmitting HIV (60.1%)
- Yet, among those rating these issues as important, ~one-third were uncomfortable discussing with their HCP

Figure 4. Illustrates treatment priorities of PLHIV who had been on ART for ≥2 Years and the proportion not comfortable discussing this with their HCP (N=1841)



- Figure 5 details the relationship between engagement in care and health outcomes

Figure 5. Adjusted Odds Ratios and Corresponding 95% Confidence Intervals for the Relationship Between Engagement in Care and Health Outcomes (N=2389)

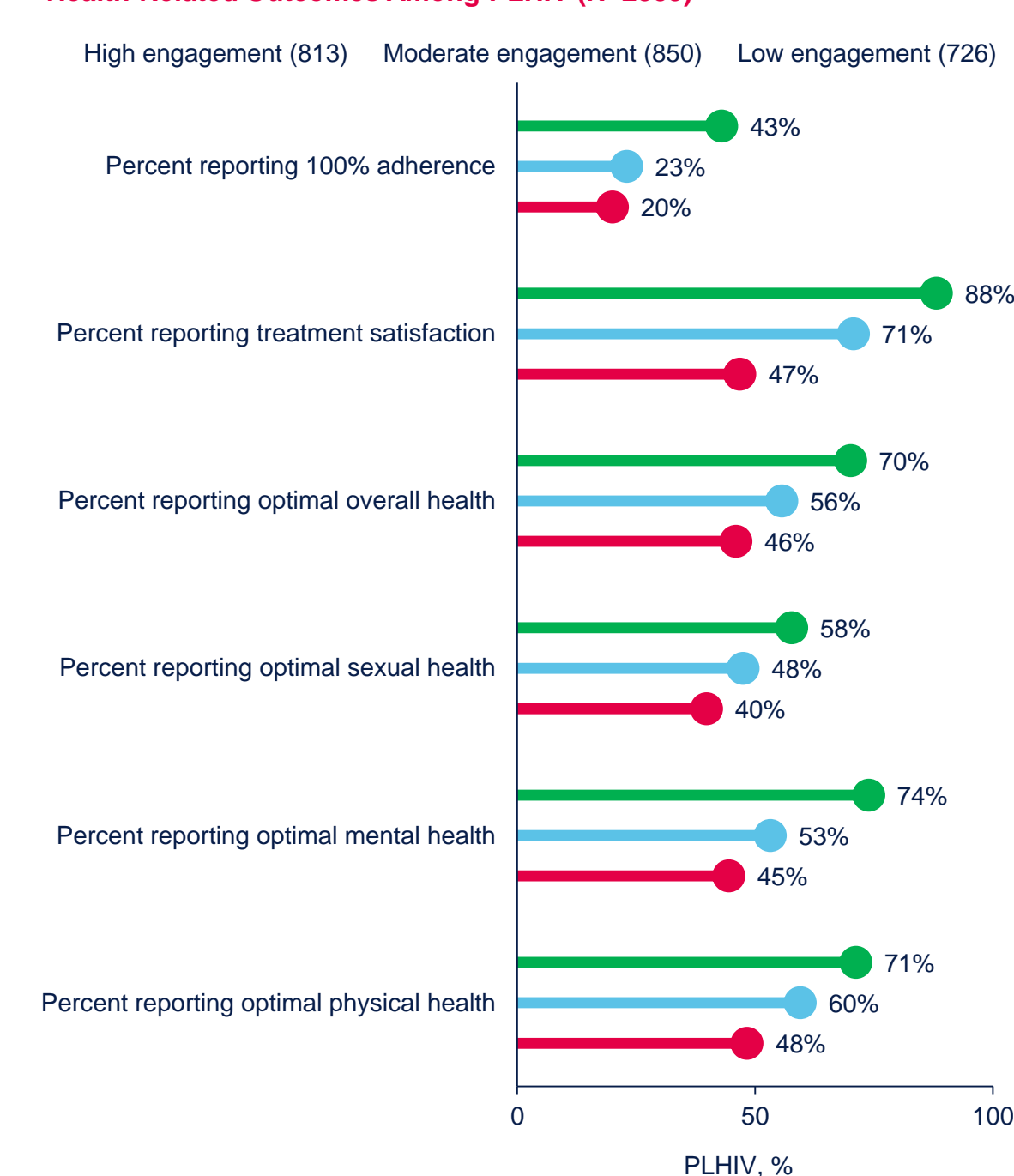
SPECIFIC HCP BEHAVIOR	PATIENT-REPORTED OUTCOME WITH LARGEST OBSERVED ASSOCIATION	# OF TIMES HIGHER ODDS OF OUTCOME BEHAVIOR VS THOSE NOT EXPOSED
① HCP provides enough information	Patient feels knowledgeable about HIV	5.9 (4.9-7.2)
② HCP seeks patients' view on treatment	Patient reports that their treatment needs are met	4.5 (3.7-5.5)
③ HCP inquires about treatment concerns	Patient reports that their treatment needs are met	3.7 (3.1-4.5)
④ HCP asks about ART side effects	Patient reports that their treatment needs are met	4.6 (3.8-5.6)
⑤ HCP discusses new treatment options	Patient reports that their treatment needs are met	4.3 (3.6-5.2)
U=U HCP has informed patient of "U=U"	Patient reports that their treatment needs are met	2.9 (2.4-3.5)

Logistic regression models controlled for gender, sexual orientation, age, duration of disease, comorbidities, region, and education. Values indicated with confidence intervals (CL).

- Specific HCP behaviors were associated with various patient responses differentially
- The strongest patient responses attributable to specific HCP behaviors are shown above
- PLHIV reporting that their HCP provided them with enough information to be involved in making treatment choices had 5.9 times higher odds than those not provided with enough information
- Involvement of patients in care, eg, seeking their view before prescribing new treatment was associated with 4.5 times higher odds of perceiving treatment needs as being met
- Of HCP behaviors assessed, the one most strongly predictive of patients' desire to be involved in care was HCPs discussing of new treatment options with patients (AOR=1.35; P<0.05)

- Prevalence of positive outcomes increased with increasing HCP engagement (Figure 6)
 - For example, the percentage who did not miss a single dose in the past month was 20% among those with low engagement, 23% with medium, and 43% with high engagement
 - Within adjusted analyses, consistent results were seen. Odds of 100% adherence (0 missed dose/past 30d) were 1.3 and 3.0 higher among those with moderate and high engagement respectively, compared to low HCP engagement (all P<0.05)

Figure 6. Relationship Between Extent of HCP-Patient Engagement and Health-Related Outcomes Among PLHIV (N=2389)



Discussion

- Good communication with HCPs on specific issues was associated with PLHIV reporting better understanding of their treatment and perceiving their treatment needs as met
- Even for the top three issues deemed as current priorities to PLHIV (ART side effects, long-term impacts of ART, and transmitting HIV to a partner), about a third of affected PLHIV did not feel comfortable sharing these concerns to their HCPs
- Of HCP behaviors assessed, the one most strongly predictive of patients' desire to be involved in care was HCPs discussing of new treatment options with patients
- Improving quality of communication between patients and HCPs may better support the fourth 90 goal of improving aspects of quality of life
 - PLHIV can be empowered by community and patient associations to ask HCPs who care about their health issues

Acknowledgments: Authors would like to thank all the PLHIV that participated in this study. Data analyses and medical writing support were provided by Zatum LLC. This study was funded by ViiV Healthcare. Editorial assistance and graphic design support for this poster were provided under the direction of the authors by MedThink SciCom and funded by ViiV Healthcare.

Conflicts of Interest: CO, MMB, and MM are employees of ViiV Healthcare.

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