

# Drivers of Discontinuation of Oral PrEP Within Europe: Findings From a Real-World Survey of PrEP Use

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## Key Takeaways

- Data were drawn from the Adelphi pre-exposure prophylaxis (PrEP) Disease Specific Programme™, a real-world, cross-sectional survey conducted across five European countries (France, Germany, Italy, Spain and the United Kingdom), to describe physicians' perspectives on current PrEP options, as well as physician-reported information on individuals' PrEP use, satisfaction and reasons for discontinuation.
- There was high physician and PrEP user satisfaction (physician-reported) with oral PrEP; however, suboptimal adherence was cited as a primary driver of dissatisfaction across both assessments.
- The most frequent physician-reported reasons for PrEP discontinuation included suboptimal adherence and issues around taking oral medications every day.
- Key drivers of future PrEP prescription included the availability of long-acting medications and individuals changing their sexual behaviour

## Background

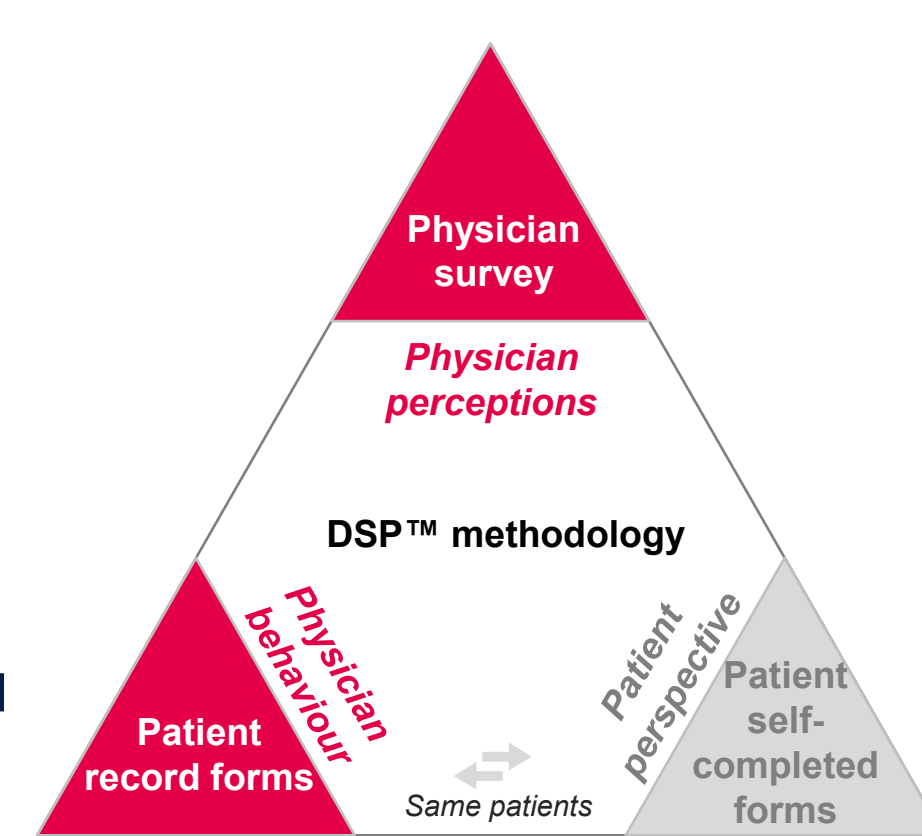
- Oral PrEP is a highly effective, guideline-recommended method for preventing new HIV acquisitions when taken and adhered to as prescribed,<sup>1-3</sup> and has been demonstrated to reduce transmission by up to 93% in real-world effectiveness studies.<sup>4</sup>
- Despite the high effectiveness of oral PrEP, barriers to widespread uptake and adherence remain, including issues such as stigma, fear of inadvertent disclosure, contraindications or intolerance, and limitations in access.<sup>5</sup>
  - Previous analyses have reported high physician satisfaction with current oral PrEP options; however, medication cost, suboptimal adherence and unsuitability for individuals with renal comorbidities were cited as limitations.<sup>6</sup>
- Since the Adelphi PrEP Disease Specific Programme™ survey was conducted, long-acting cabotegravir has been approved for PrEP, and it has the potential to address issues around adherence and uptake in populations not effectively supported with current oral PrEP options.<sup>6</sup>
- Using data from a real-world, cross-sectional survey, we describe physicians' perspectives on current PrEP options, as well as physician-reported information on individuals' PrEP use, satisfaction and reasons for discontinuation.

## Methods

- Data were collected from the Adelphi PrEP Disease Specific Programme™,<sup>7-9</sup> a real-world, cross-sectional survey with retrospective data collection (Figure 1), conducted between November 2022 and June 2023 in five European countries (France, Germany, Italy, Spain and the United Kingdom).
- Infectious disease specialists and primary care physicians who treated ≥10 people receiving PrEP each month were asked to provide their perspectives on current PrEP options, as well as details on the next 6 people consulted who were receiving PrEP (referred to as "PrEP users" throughout) and 4 people not currently receiving PrEP but who would benefit from it (referred to as "PrEP non-users" throughout).
- All data are summarised descriptively.

**Figure 1. Overview of the Disease Specific Programme™ (DSP)**

Adelphi PrEP DSP™, a real-world, cross-sectional survey\*



\*Red indicates components of the DSP™ methodology included in the present analysis.

## Results

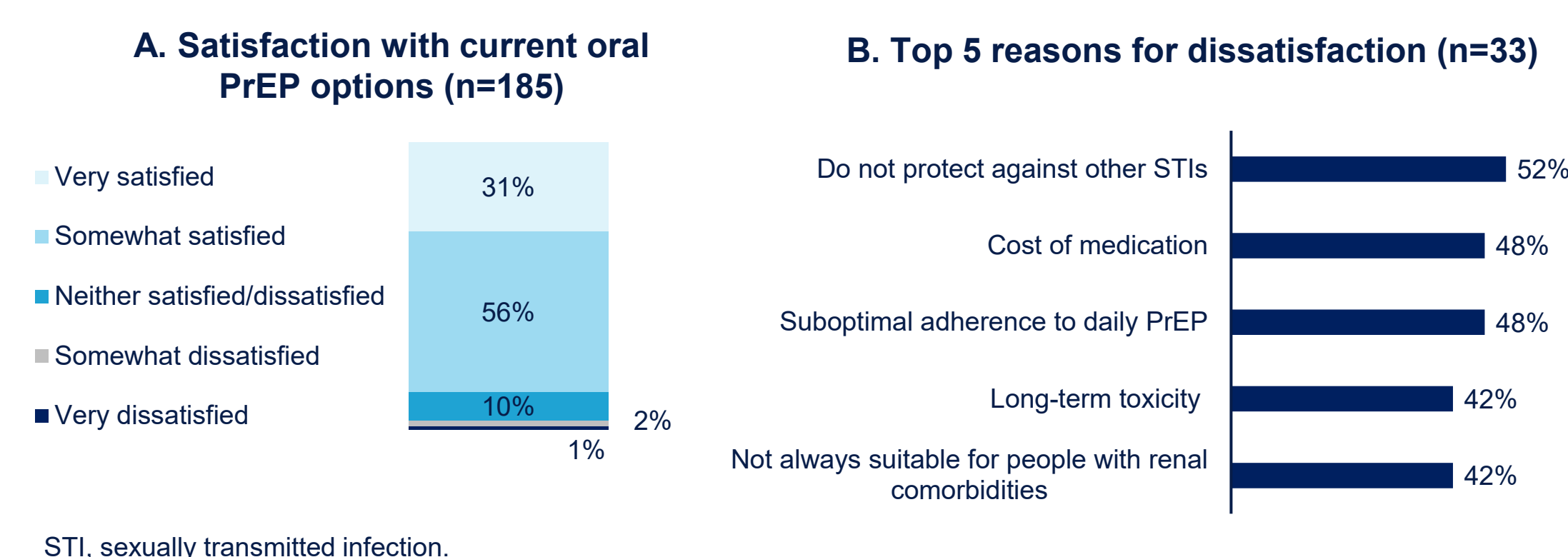
- Overall, 189 physicians provided information for 1884 individuals, of whom 1105 were PrEP users and 779 were PrEP non-users (Table 1).
- Most individuals (PrEP users; PrEP non-users) were White (83%; 83%), male (sex at birth) (85%; 81%) and homosexual (70%; 63%), with a median age of 34 and 33 years, respectively.

**Table 1. Baseline Characteristics of PrEP Users and PrEP Non-Users**

% unless otherwise specified	PrEP use category		Overall (N=1884)
	PrEP users (n=1105)	PrEP non-users (n=779)	
<b>Age</b>			
Median (IQR), years	34 (28–42)	33 (27–42)	33 (28–42)
<b>Sex</b>			
Female	13.6	17.7	15.3
Male	85.2	80.7	83.3
Intersex	1.3	1.5	1.4
<b>Gender identity</b>			
Cisgender	89.1	90.4	89.6
Transgender	6.7	6.2	6.5
Nonbinary or gender queer	2.1	2.6	2.3
Other	2.1	0.9	1.6
<b>Sexuality</b>			
Homosexual	70.3	63.0	67.3
Heterosexual	15.9	22.1	18.5
Bisexual or pansexual	13.8	14.9	14.2
<b>Country</b>			
France	29.0	27.6	28.5
Germany	21.6	20.7	21.2
Spain	21.7	21.3	21.5
Italy	19.9	23.2	21.3
United Kingdom	7.7	7.2	7.5
<b>Ethnicity</b> (question not asked in France)*			
White/Caucasian	82.8	82.6	82.7
Hispanic/Latinx	10.7	9.4	10.2
Afro-Caribbean	3.4	5.0	4.1
Asian (Indian subcontinent)	0.8	1.2	1.0
South-East Asian	0.8	0.7	0.7
Asian (other)	0.9	0.4	0.7
Middle Eastern	0.5	0.5	0.5
Other	0.1	0.2	0.1
<b>BMI</b> <sup>†</sup>			
Median (IQR), kg/m <sup>2</sup>	23.9 (22.2–25.8)	23.7 (22.2–25.9)	23.9 (22.2–25.9)
<b>Probability of acquiring HIV<sup>‡</sup></b>			
No probability	–	2.4	–
Mild probability	–	11.7	–
Moderate probability	–	29.0	–
Severe probability	–	40.3	–
Very severe probability	–	16.6	–

\*PrEP users, n=784; PrEP non-users, n=564. †PrEP users, n=1095; PrEP non-users, n=771. ‡Physician perception. BMI, body mass index; IQR, interquartile range.

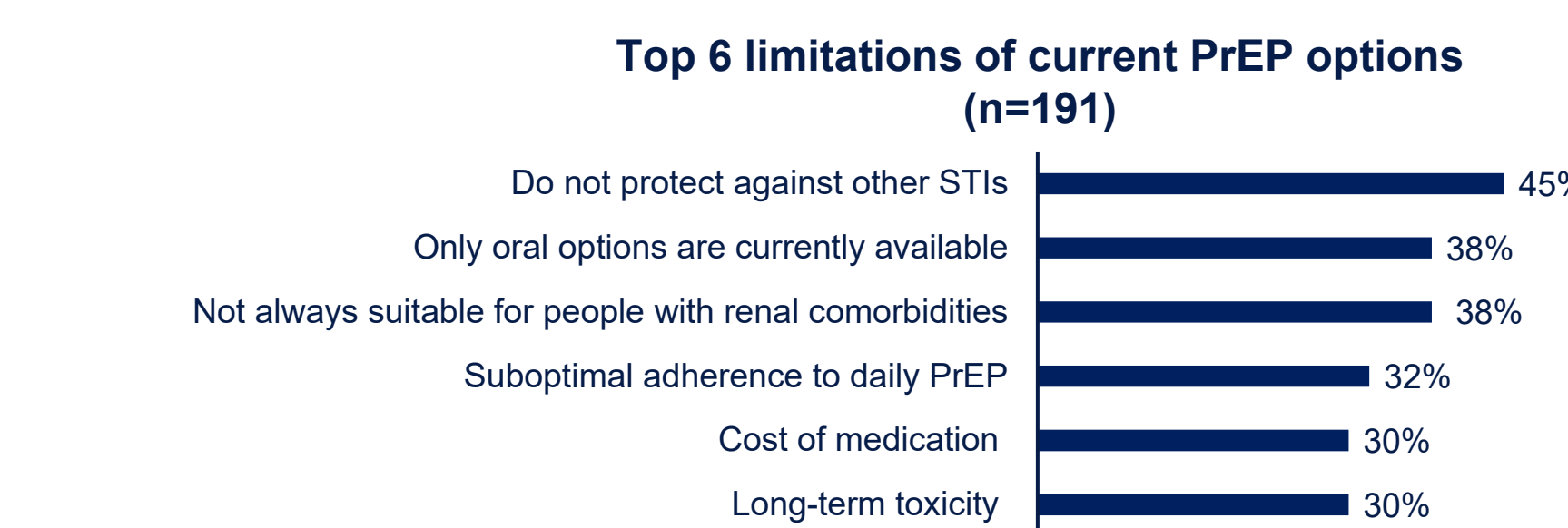
**Figure 2. Physician Satisfaction With Current Oral PrEP Options (A) and Reasons for Dissatisfaction (B)**



- High physician satisfaction with current oral PrEP options was observed (87% somewhat or very satisfied; Figure 2A).
- Reasons for physician dissatisfaction included the fact that PrEP does not protect against other sexually transmitted infections (52%), the cost of medication (48%) and suboptimal adherence observed with daily PrEP (48%; Figure 2B).

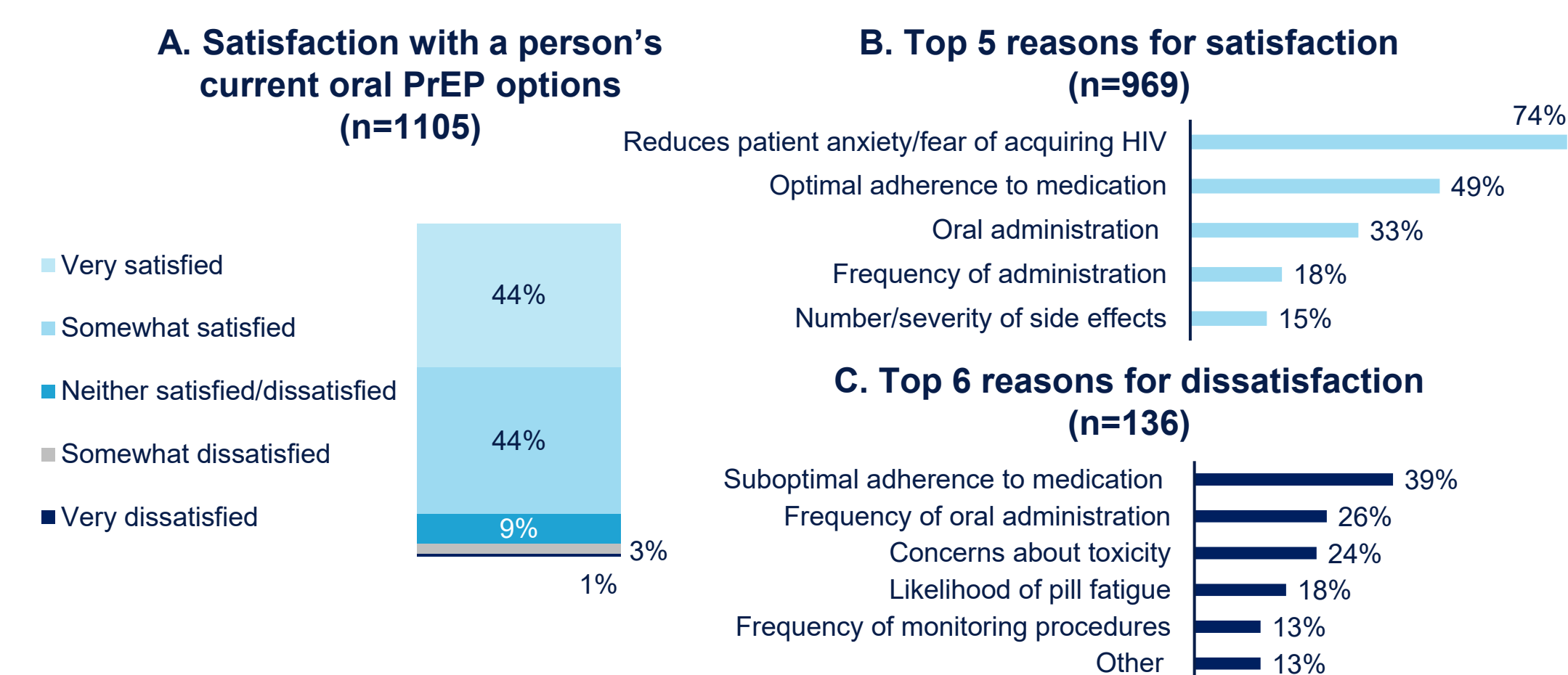
**Acknowledgments:** Data collection was undertaken by Adelphi Real World as part of an independent survey, entitled the Adelphi PrEP Disease Specific Programme™, sponsored by multiple pharmaceutical companies, of which ViiV Healthcare was one. ViiV Healthcare did not influence the original survey through either contribution to the design of questionnaires or data collection. The authors thank everyone who has contributed to the success of the Adelphi PrEP Disease Specific Programme™, including all study participants and their families and the clinical investigators and their staff. Editorial assistance was provided by Euan Paul at Somentum (Nucleus Global), with funding provided by ViiV Healthcare.

**Figure 3. Physician-Perceived Limitations of Oral PrEP**



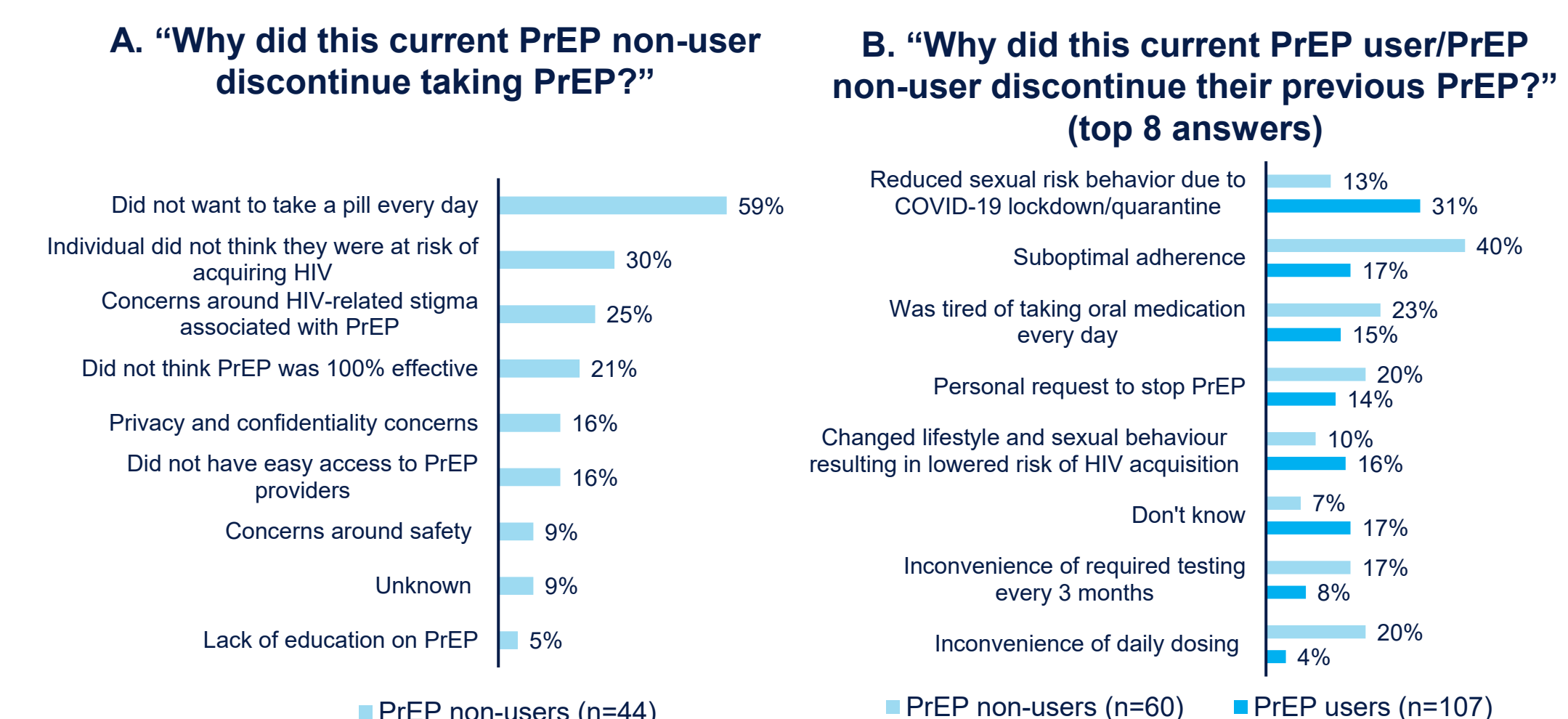
- Physician-perceived limitations of current PrEP options included the fact that they do not protect against other sexually transmitted infections (45%), that only oral options are currently available (38%) and that they are not always suitable for those with renal comorbidities (38%; Figure 3).

**Figure 4. Satisfaction (Physician-Reported) With an Individual's Current Oral PrEP (A) and Reasons for Satisfaction (B) or Dissatisfaction (C)**



- High satisfaction (physician-reported) with an individual's oral PrEP was recorded (88% somewhat or very satisfied; Figure 4A), with supporting reasons including reductions in anxiety or the fear of acquiring HIV (74%; Figure 4B).
- Reasons for dissatisfaction (physician-reported) with current PrEP for PrEP users included suboptimal adherence to medication (39%) and frequency of oral administration (26%; Figure 4C).

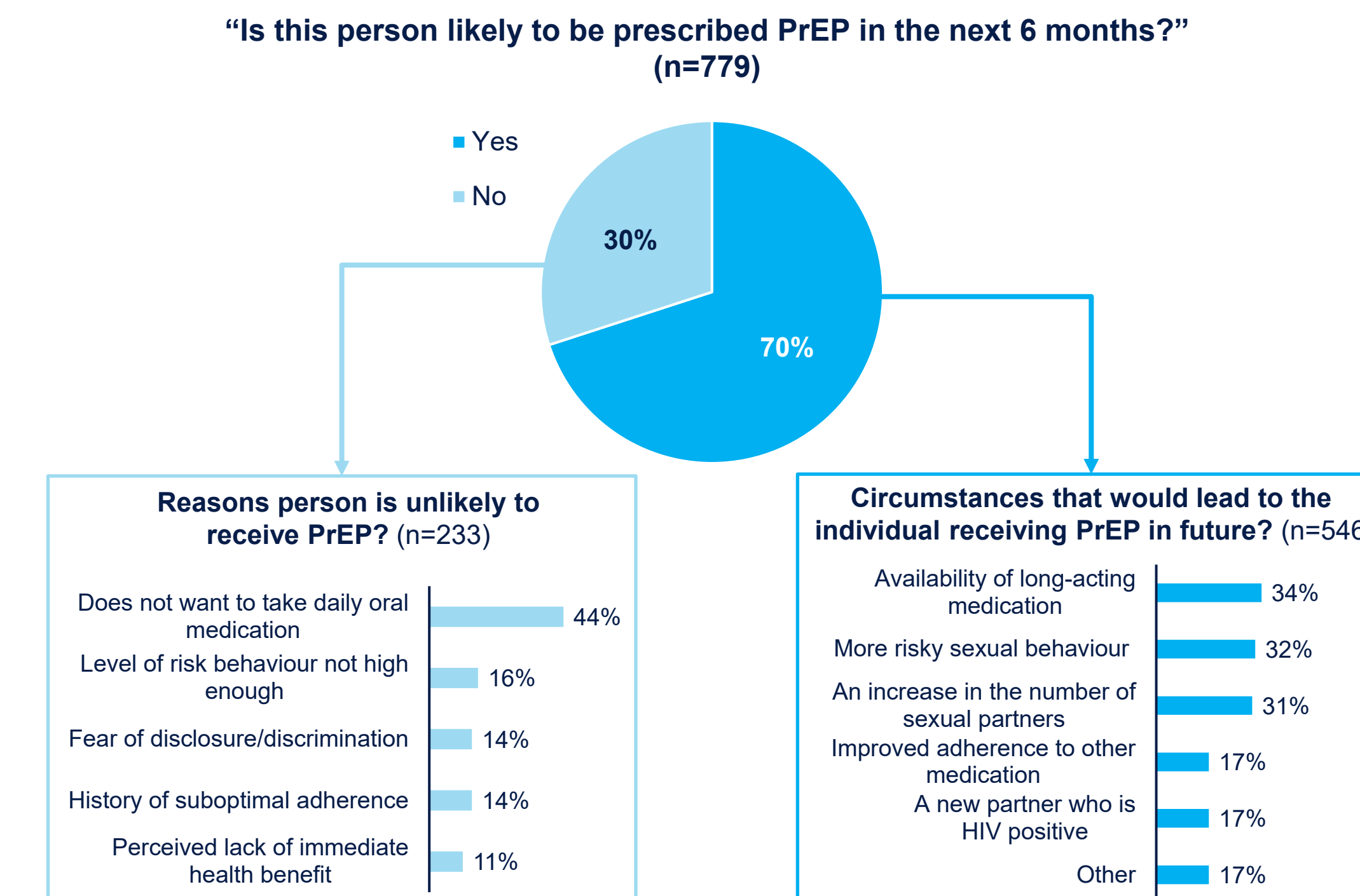
**Figure 5. Reasons (Physician-Reported) for Complete PrEP Discontinuation (A) and Discontinuation of a Previous PrEP Medication (B)**



**References:** 1. U.S. Department of Health and Human Services. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV. 2023. Available from: <https://clinicalinfo.hiv.gov/en/guidelines>. Accessed September 2023. 2. European AIDS Clinical Society. Guidelines Version 11.1. 2022. Available from: [https://www.eacsociety.org/media/guidelines-11.1\\_Final\\_09-10.pdf](https://www.eacsociety.org/media/guidelines-11.1_Final_09-10.pdf). Accessed September 2023. 3. International Antiviral Society–USA. Antiretroviral Drugs for Treatment and Prevention of HIV Infection in Adults: 2022 Recommendations of the International Antiviral Society–USA Panel. 2022. Available from: <https://www.iasusa.org/resources/guidelines/>. Accessed September 2023. 4. Jourdain H, et al. *Lancet Public Health*. 2022;7(6):e529–e536. 5. Muhumuza R, et al. *Arch Sex Behav*. 2021;50(4):1729–1742. 6. Schroeder M, et al. *AIDS Impact* 2023. 7. Anderson P, et al. *Curr Med Res Opin*. 2008;24(11):3063–3072. 8. Babineaux SM, et al. *BMJ Open*. 2016;6(8):e010352. 9. Higgins V, et al. *Diabetes Metab Syndr Obes*. 2016;3:371–380.

- Reasons (physician-reported) for discontinuation in current PrEP non-users included not wanting to take a pill every day (59%) and the individual not thinking they were at risk of acquiring HIV (30%; Figure 5A).
- Reasons (physician-reported) for discontinuation of previous oral PrEP medication included reduced sexual risk behaviour due to COVID-19 lockdown/quarantine (PrEP users, 31%; PrEP non-users, 13%) and suboptimal adherence (PrEP users, 17%; PrEP non-users, 40%; Figure 5B).

**Figure 6. Future PrEP Prescription**



- Physicians reported that 70% of PrEP non-users would likely be prescribed PrEP in the next 6 months (Figure 6).
- Reasons for PrEP non-users being unlikely to receive PrEP included not wanting to take oral medication every day (44%), level of risk behaviour not high enough (16%), fear of disclosure or discrimination (14%) and suboptimal adherence (14%).
- Key drivers of future PrEP prescription included the availability of long-acting medications (34%) and individuals engaging in more risky sexual behaviour (32%).

## Conclusions

- High physician and PrEP user satisfaction (physician-reported) with current oral PrEP was observed, with supporting reasons including reductions in anxiety and the fear of acquiring HIV.
- The most frequently reported reasons for PrEP discontinuation and dissatisfaction (physician-reported) were suboptimal adherence and issues associated with taking oral medication every day.
- Of those who were likely to be prescribed PrEP in the future, the availability of long-acting medications was cited as the most common reason that would lead to an individual receiving PrEP.
  - For those who were unlikely to receive PrEP in the future in the absence of an alternative option being available, the most common reason was the individual not wanting to take daily oral medication.
- The introduction of long-acting PrEP could provide an alternative option addressing some of the limitations of current PrEP options, including stigma, fear of inadvertent disclosure and the requirement of taking daily pills.
- Further research based on PrEP user/non-user reported data will be the subject of future publications, as physician-reported data may not completely capture the perspectives of the individual.

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