Perceived Impact of an Electronic Patient-Reported Outcomes Platform (MyPRO) on Patient-Provider Interactions Among Women Living With and Without HIV in a Community Health Clinic Serving Racialized Women in Toronto, Canada

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Key Takeaways

- **MyPRO was acceptable, easy to use, and helpful for describing health symptoms and behaviors that may otherwise not be addressed for both people living with (PLHIV) and without HIV (PLWOH)**
- **PLHIV in general perceived a greater impact of MyPRO on their interactions with providers, and PLHIV also indicated higher overall satisfaction with the assessment**
- **More PLHIV than PLWOH directly discussed MyPRO results with providers, but the frequency of conversations about topics like quality of life, depression, drug use, and sexual behaviors was similar in both groups**
- **MyPRO facilitated and broadened discussions between PLHIV and providers about experiences on HIV medication**

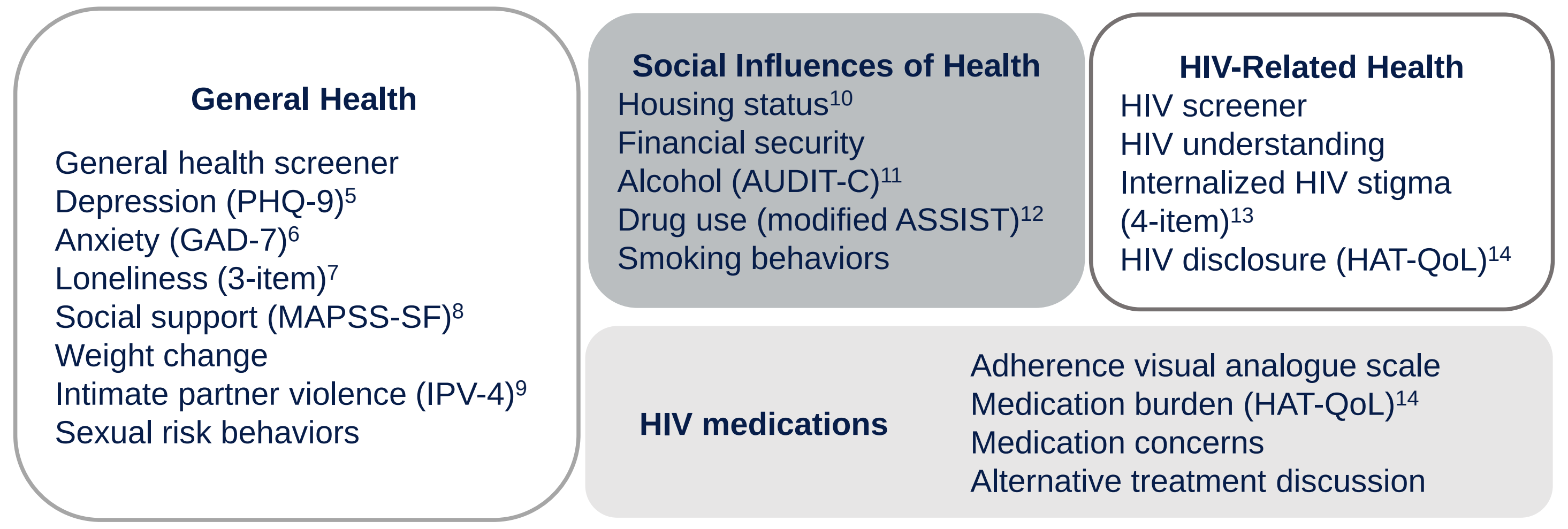
Introduction

- Self-administered patient-reported outcome (PRO) assessments can highlight patient needs to providers, improving care in some settings[1-3]
- It is not clear if the influence of PROs on care is similar for people living with and without HIV
- We explore the acceptability and impact of a PRO screener on patient-provider interactions in a Toronto community health clinic primarily serving racialized women with immigrant or refugee status

Methods

- Participants completed self-administered, electronic PRO assessments (MyPRO)
- The PRO covered domains including psychosocial needs, health behaviors, and, if applicable, HIV-specific concerns (**Figure 1**)
- Providers received MyPRO results before the clinical visit
- After the appointment, patients completed a survey assessing PRO acceptability and impact on patient-provider interactions
  - The evaluation survey included the Acceptability E-Scale,[4] items addressing ease and means of access, and the Perceived Impact of Patient-Reported Outcomes on Patient-Provider Interaction (PIPPI) survey[1]
- Descriptive statistics overall and stratified by HIV status were generated excluding missing/not-applicable responses

Figure 1. MyPRO domains and PRO components



General Health

General health screener
Depression (PHQ-9)[5]
Anxiety (GAD-7)[6]
Loneliness (3-item)[7]
Social support (MAPSS-SF)[8]
Weight change
Intimate partner violence (IPV-4)[9]
Sexual risk behaviors

Social Influences of Health

Housing status[10]
Financial security
Alcohol (AUDIT-C)[11]
Drug use (modified ASSIST)[12]
Smoking behaviors

HIV-Related Health

HIV screener
HIV understanding
Internalized HIV stigma (4-item)[13]
HIV disclosure (HAT-QoL)[14]

HIV medications

Adherence visual analogue scale
Medication burden (HAT-QoL)[14]
Medication concerns
Alternative treatment discussion

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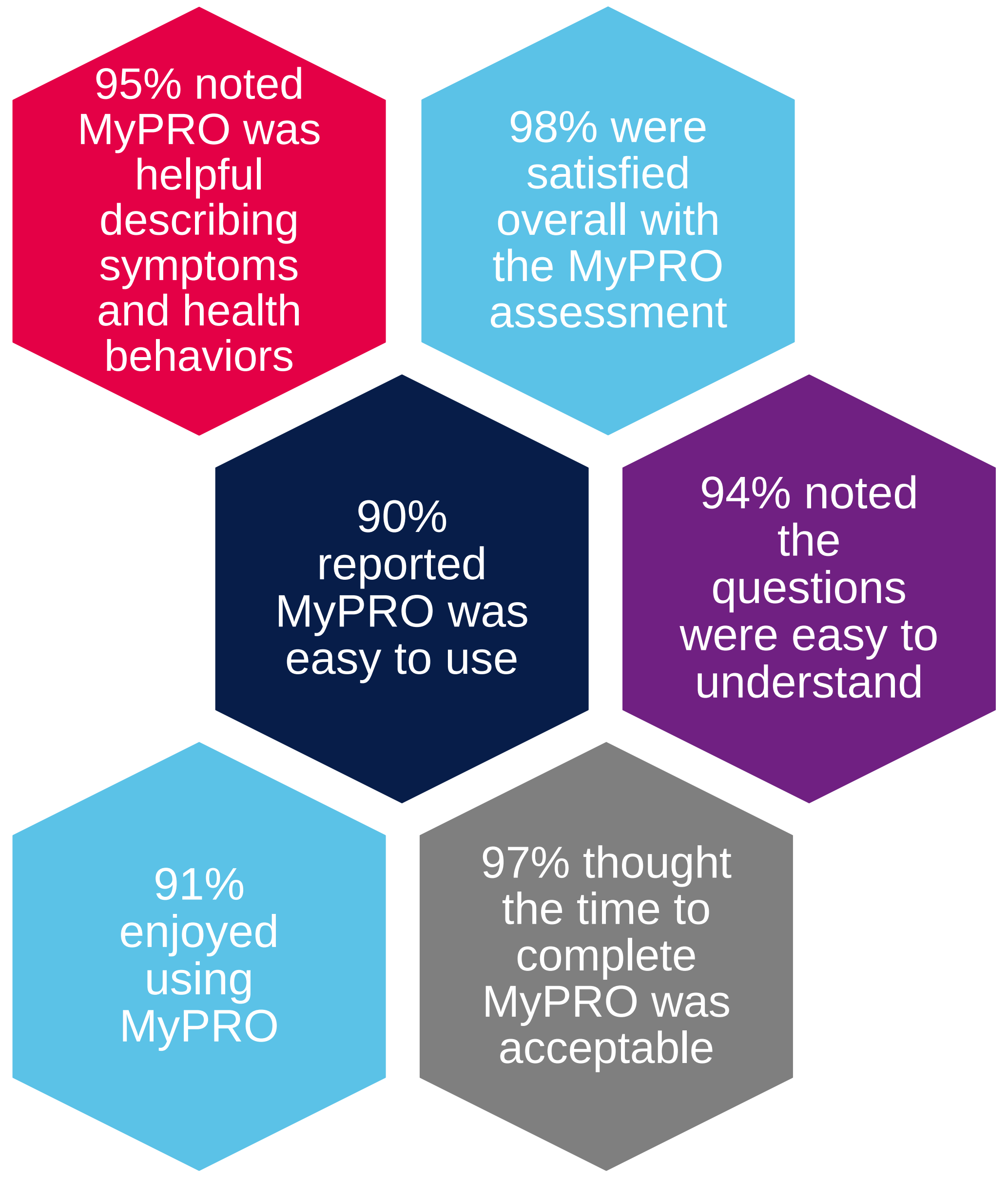
Results

- Evaluation surveys were completed by 105 patients, 66 of whom were people living with HIV (PLHIV)
- Most patients regardless of HIV status reported that MyPRO was easy to use and that the time it took to complete was acceptable (**Figure 2**)
  - Overall satisfaction and helpfulness describing symptoms and health behaviors were higher among PLHIV than people living without HIV (PLWOH)
- More PLHIV (94%, n=61) than PLWOH (84%, n=32) discussed MyPRO results with their provider during the appointment
- MyPRO influenced patient-provider interactions in meaningfully different ways among people living with and without HIV (**Table 1**)
  - In general, PLHIV perceived a greater perceived impact on their interactions with providers, including their preparation for their visit
- The frequency of discussions about several health domains (e.g. depression, sexual behaviors) was similar across both PLHIV and PLWOH (**Table 2**)
- Many PLHIV had conversations with providers about how they were feeling about their HIV medications, including some patients discussing alternative medications (**Figure 4**)

Figure 2. Perceptions of MyPRO use among all patients (n=105)



95% noted MyPRO was helpful describing symptoms and health behaviors

98% were satisfied overall with the MyPRO assessment

90% reported MyPRO was easy to use

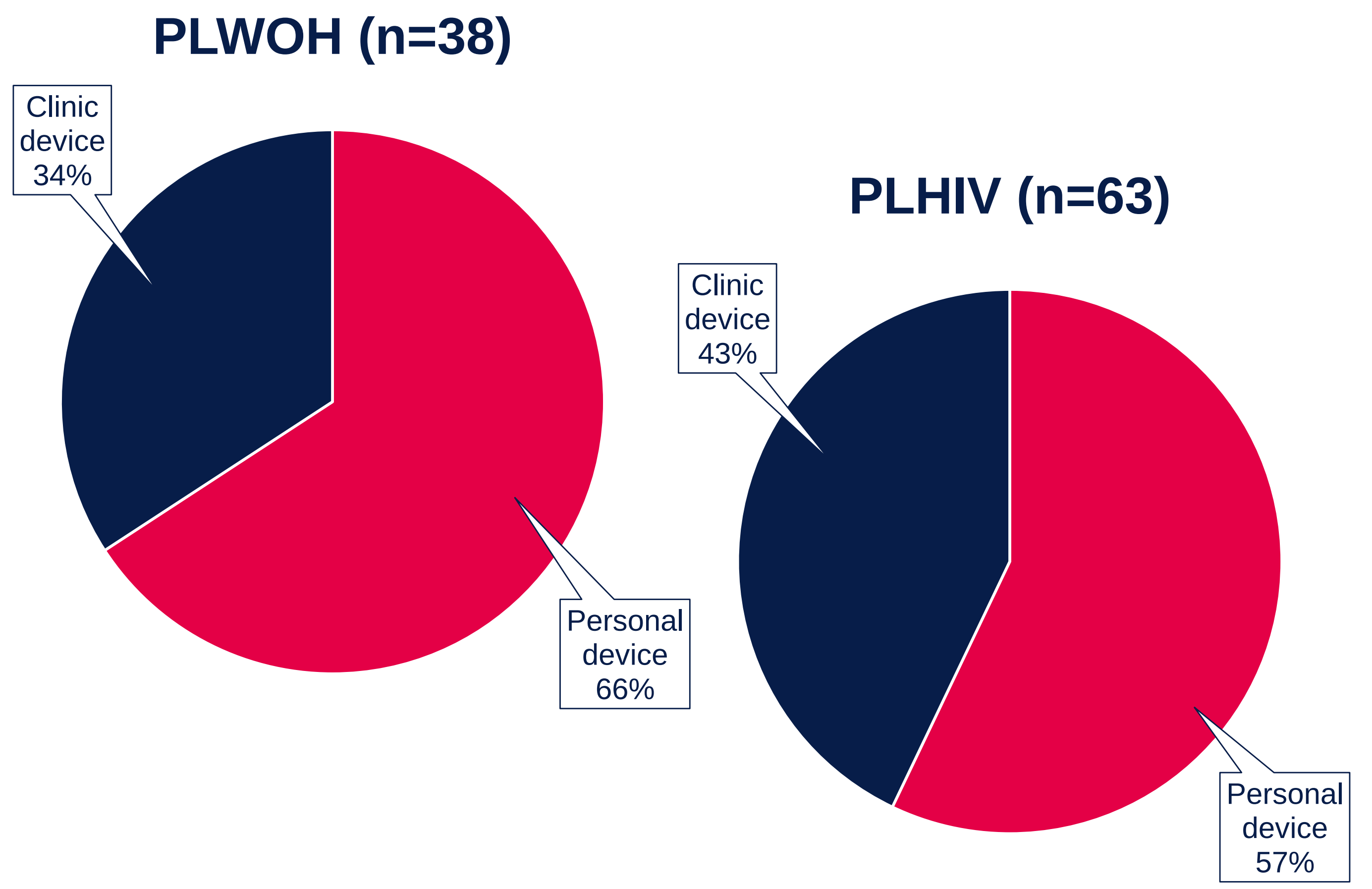
94% noted the questions were easy to understand

91% enjoyed using MyPRO

97% thought the time to complete MyPRO was acceptable

Patients found MyPRO acceptable, easy to use, and helpful for describing their health experiences.

Figure 3. Mode of completion for MyPRO assessment by HIV status



More PLHIV completed MyPRO on a clinic device and perceived a greater impact on their interactions with providers.

Table 1. Patient perceptions of MyPRO's impact on patient-provider interactions by HIV status, mean (SD)

Item Scale: 1 (A lot), 2 (Somewhat), 3 (Not at all)	**PLHIV** (n=66)	**PLWOH** (n=39)	**Total** (n=105)
Helped me think about my overall health	1.3 (0.5)	1.4 (0.6)	1.3 (0.5)
Helped me decide what to talk about with my doctor	1.4 (0.6)	1.9 (0.5)	1.6 (0.6)
Helped me discuss things that are private or difficult to talk about	1.3 (0.6)	1.9 (0.6)	1.6 (0.7)
Helped remind me to bring up specific health concerns I might have otherwise forgotten	1.4 (0.7)	1.7 (0.6)	1.5 (0.6)
Helped me discuss things that otherwise might not have been brought up	1.4 (0.6)	1.9 (0.6)	1.6 (0.6)
Helped make the appointment better overall	1.4 (0.6)	1.8 (0.5)	1.6 (0.6)

Missing/NA data removed for each item (range 2-3 missing responses per item).

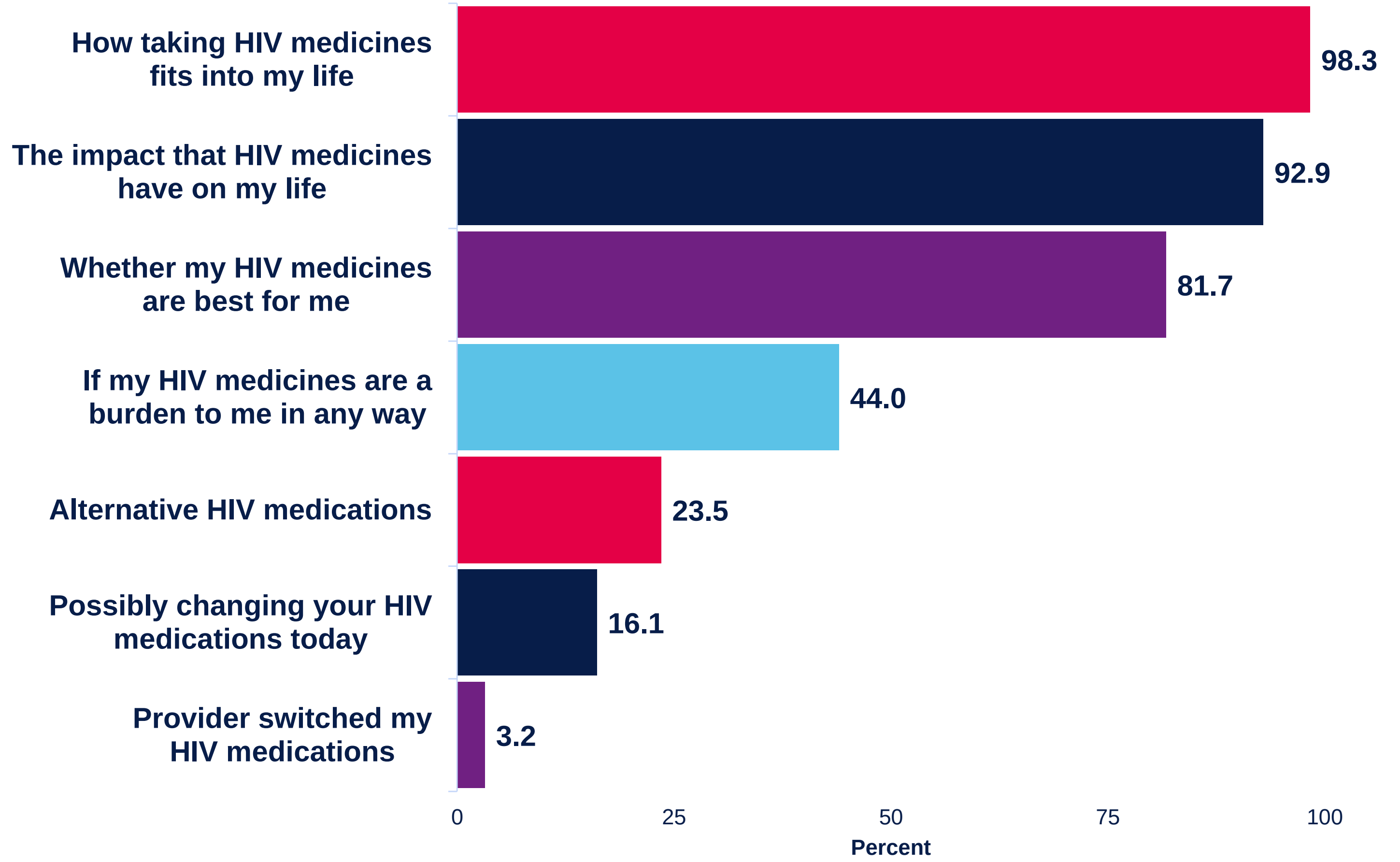
Proportions discussing general health topics were similar across PLHIV and PLWOH. Most PLHIV discussed with providers how HIV medicine impacts their life.

Table 2. Topics patients discussed with their provider during the appointment by HIV status, n (%)

Discussion topics	**PLHIV** (n=66)	**PLWOH** (n=39)
Quality of life	64 (100)	36 (97.3)
Depression	33 (53.2)	19 (55.9)
Smoking habits	8 (13.6)	6 (19.4)
Drinking/alcohol use	16 (26.7)	6 (19.4)
Drug use	9 (15.5)	4 (12.9)
Sexual behaviors	25 (39.7)	14 (40.0)

Missing/NA data removed for each item (range 2-9 missing responses per item).

Figure 4. HIV-specific topics discussed between patients and providers during the appointment (%)



Conclusions

- MyPRO was acceptable among people living with and without HIV
- Most patients reported discussing MyPRO results with their providers
- PLHIV generally perceived a greater impact on their interactions with providers

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