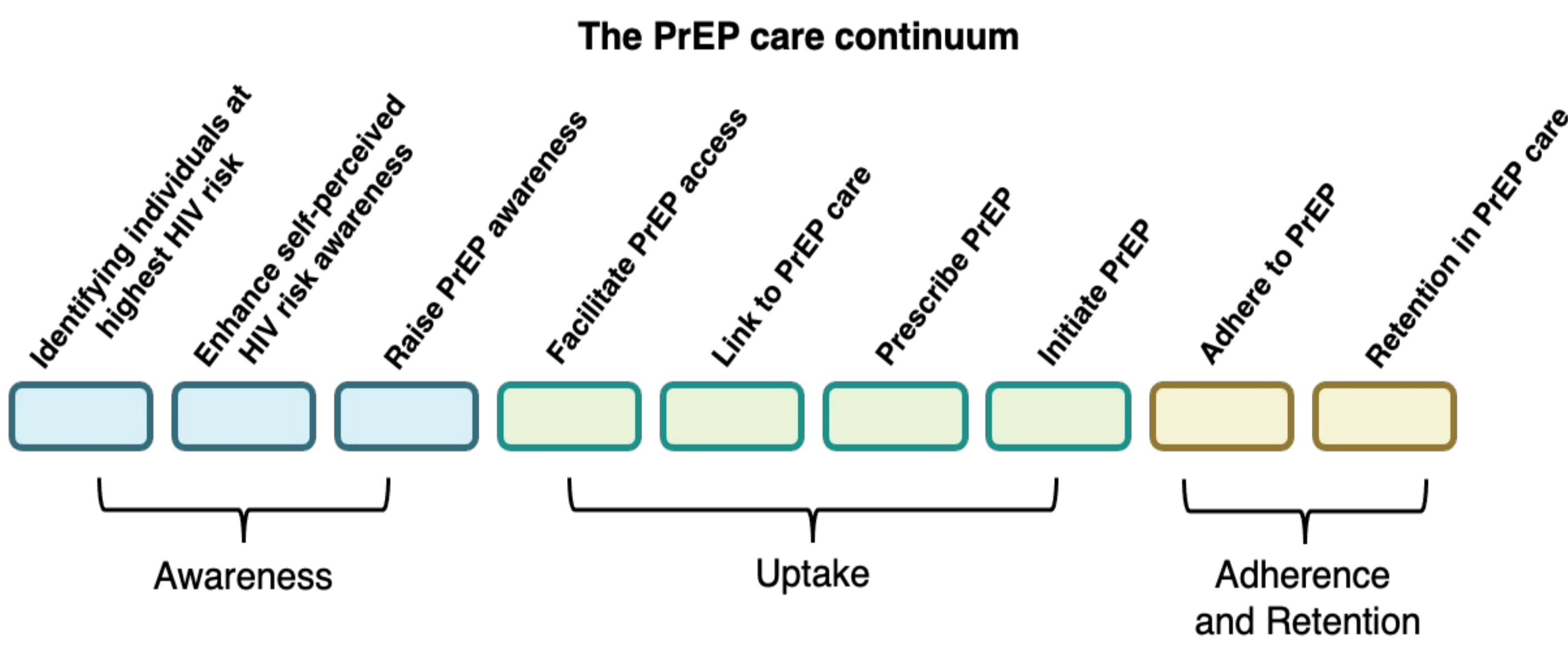


Introduction

Puerto Rico (PR) is a unincorporated territory of the United States, located in the Caribbean. It is estimated that more than 3.2 million people live in the archipelago.¹ Nearly 51,610 people have been diagnosed with HIV/AIDS in PR since the beginning of the epidemic.² San Juan, Puerto Rico is one of the 48 jurisdictions (+Washington, DC) accounting for more than 50% of all new HIV diagnoses in the U.S. Puerto Rico has one of the highest HIV rates, with a prevalence of 564.1 x 100,000 diagnosis rate (for 2020). By February 2023, 51,463 persons had been diagnosed with HIV and AIDS in PR. In PR, 79.1% of HIV/AIDS cases are among men, of which 71% are sexual minority men (SMM).³



Pre-Exposure Prophylaxis (PrEP) is a highly effective medication to reduce the risks for HIV infection. PrEP uptake among Latinxs in Puerto Rico is the lowest in the United States (U.S.).⁴ Yet, this population continues to be highly impacted by the HIV epidemic. Despite the promising opportunity to reduce the number of new HIV infections, as of 2021, only 343 individuals were using PrEP in Puerto Rico.⁵ The PrEP care continuum illustrates a sequence of steps, including main benchmarks: **Awareness**, **Uptake**, and **Adherence and Retention**. The continuum is a reference for developing effective interventions and measuring public health progress in PrEP program implementation.⁶

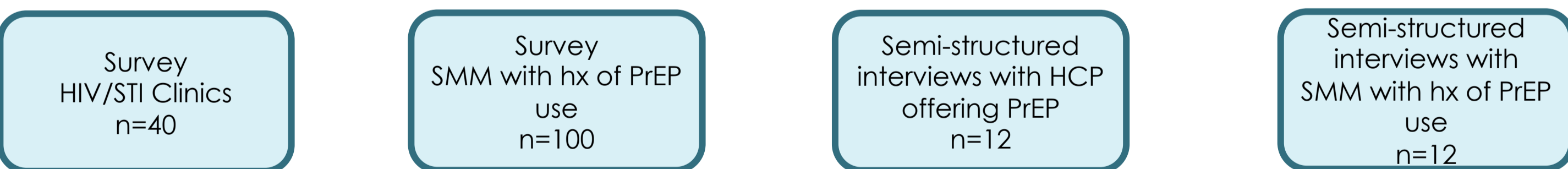


Objective

Understanding the challenges faced by disproportionately impacted groups that impact PrEP uptake can inform the development of relevant approaches to increase PrEP uptake, especially among disenfranchised groups. This analysis aims to identify structural barriers within the PrEP care continuum to inform an intervention study to increase PrEP uptake among SMM in PR.

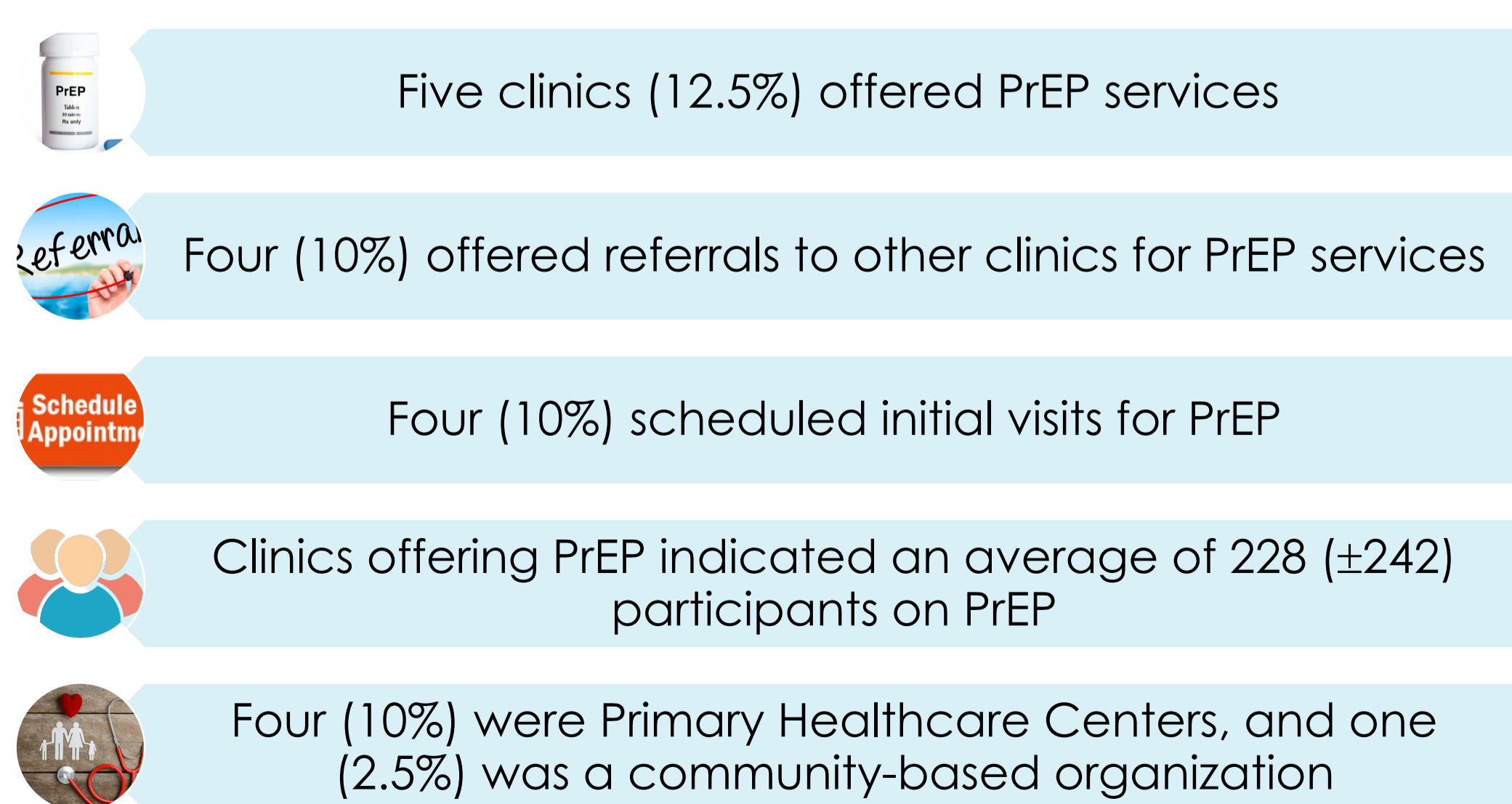
Methods

We conducted a mixed methods multi-source secondary data analysis to characterize the availability and uptake of PrEP services among sexual minority men (SMM) in PR. Descriptive statistics and a thematic analysis were completed.



Results

Figure 1. PrEP related services offered by HIV/STI clinics in Puerto Rico (n=40)



Results

Table 1. Structural barriers to access to PrEP services

Barrier Category	Qualitative Results
Cost	<ul style="list-style-type: none"> "At least in my case I have not seen it, but I see more the issue of cost and accessibility to medical insurance plans. Eh, it seemed quite trite that I am paying for a private medical insurance plan, so they don't want to cover all the medication for me." (SMM 14)
Medical Insurance	<ul style="list-style-type: none"> "That [the person] does not have a medical insurance plan, because the medication is expensive. Could be made more accessible" (SMM 12) "Only, this, some [medical insurance] coverage, [public medical insurance] coverage provides it, but other than that, no other medical plan provides it. Well, that is a very big barrier, because then we have to contact a pharmaceutical company in the United States so that they can then have the treatment." (HCP 10)
Lack of knowledge	<ul style="list-style-type: none"> "[public medical insurance], because sometimes they ask me that the prescription have a countersignature, from their primary doctor, but what happens, the primary doctors outside of what are these centers that offer these services, not all the doctors know about it. And then they take the prescription, go to their primary doctor and say 'what is this?' (HCP 06) But above all it is the lack of knowledge because it is good, it is very frustrating every time a patient comes to me and says: 'I saw a certain doctor in such a place and he told me since when did I have HIV or because I am using a pill for HIV'. And if they know what HIV treatment is, you cannot give monotherapy because it can mutate. And that is where, well, it once again demonstrates the lack of knowledge in the medical class, which is quite large. (HCP 12) My doctor ignorantly what I told you. That she thought I had HIV and it's because of the treatment and... knowing that she's a doctor, she didn't know how to answer that. And I was like, oh wow. A doctor, okay. Which is the one that she is supposed to tell me about the protocols, how are the things that have to be done and everything is in CoNCRA that I do it for that reason already in my HIPPA what I go to is normal. I am not going to a HIPPA" (SMM 11) "[...] the ignorance of the medical class that occurs in Puerto Rico is quite remarkable. A lot of doctor because Galen of the old guard. I don't know if they are unaware or because they don't want to, they are unaware that this medication can be used to prevent the HIV virus." (HCP 12)
Clinic Availability	<ul style="list-style-type: none"> "In Puerto Rico there are currently three clinics that are authorized to offer PrEP without any setbacks. They have been the Ararat Center, the other is Puerto Rico CoNCRA and the other is Migrants in Mayagüez." (PCH 12) "[...] at the moment, there are, like, three or four clinics that are offering services in Puerto Rico, that this is growing and at least here we are who tell us the but: 'diache this, but the appointments are for so away'" (HCP 09)

Table 2. Structural barriers along the PrEP Continuum

PrEP care continuum step	Quantitative Results (n=100)	Qualitative Results
Awareness	<ul style="list-style-type: none"> Q: Where did you first hear the information about PrEP? [Check all that apply] Internet, social media, and dating apps (n=72, 50.7%) Friends (n=39, 27.46%) Healthcare providers (n=9, 6.34%) 	<ul style="list-style-type: none"> "Well, I learned about PrEP through social networks... and it was because of friends. Hey, there are many social networks, for example, I'm going to give you one, Growler". (SMM 08) "There is a lot of promotion of the products, but not where to get it and how is the process". (SMM 03)
Uptake	<ul style="list-style-type: none"> Q: What have been the limitations that you encountered in the process of starting PrEP? [Check all that apply] Insurance and provider-related barriers (n=34, 21.38% each) Stigma (n=30, 18.87%) 	<ul style="list-style-type: none"> "When I applied for PrEP, it was really uphill for the medical insurance to approve the PrEP. If I stop PrEP now, I know they won't give it to me again. For that reason, I am not going to stop using it". (SMM 08) "Since I have public insurance, they asked me for the signature of the primary doctor, I go to my primary doctor and the doctor doesn't know what PrEP is. He didn't want to sign the laboratory order." (SMM 06) "Besides, they believe that you are promiscuous, and you are using it [PrEP] because you are sexually active. And not! At least I'm not like that". (SMM 11)
Adherence and Retention	<ul style="list-style-type: none"> Q: Which of the following makes it difficult for you to stay on PrEP? [Check all that apply] Worries regarding side effects and forgetfulness (n=42, 16.73% each) Costs of medication and laboratories (n=24, 9.56%) 	<ul style="list-style-type: none"> "What they had told me is that supposedly PrEP could damage your kidneys, liver, but obviously I have done the tests normally and I have not had any type of change in terms of those, the symptoms of that". (SMM 09) Well, the issue of the role of medical insurance in the cost of this [PrEP], which seems incredible that they cover other medications and not this". (SMM 14)

Conclusion

We identified significant barriers along the PrEP care continuum.

- PrEP related cost are high (including pills and required labs)
- Medical Insurance companies are not covering PrEP as part of preventing care
- Limited availability of clinic around Puerto Rico pose a threat to access
- Lack of knowledge from non-HIV providers is notable and delaying/limiting access to PrEP.

Although initial strides have been taken to increase PrEP uptake among SMM in PR, we are a long way behind in having true availability of the prevention strategy. Structural barriers such as lack of readiness for PrEP services, poor knowledge from providers, and stigma still hinder PrEP services in PR. More efforts to support the strategy are needed to ensure those at risk can have proper access to PrEP.

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