

# Financial cost of a PrEP program among adolescent men who have sex with men and transgender women in Brazil

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## Background

PrEP is offered as a taxpayer's money program since 2017 for adults 18 years old (yo) or older in Brazil. PrEP is cost-effective in preventing HIV infections in adults. Nevertheless, it is important to expand PrEP to youth at high risk of HIV such as adolescent men who have sex with men (aMSM) and transgender women (aTGW).

## Goal

We aimed to estimate the costs of scaling-up PrEP to adolescents aged 15 to 17 years old in two cities of Brazil.

## Methods

PrEP1519 is a demonstration cohort study of daily TDF/FTC as PrEP among aMSM and aTGW aged 15-19 yo. It was conducted in three Brazilian capital cities (Salvador, São Paulo, and Belo Horizonte).

We used data from two cities of the PrEP1519 study, the Brazilian National Health System (SUS) databases for prices of commodities, and conducted interviews with health providers of PrEP Programs to assess the use of resources.

We assessed the costs into three main categories: set-up, capital, and recurrent costs. Set-up and capital costs were annualized using a discount rate of 5%.

Costs were estimated as total costs to the health system and average costs per participant.

## Results

The total cost of PrEP in Salvador was estimated at US\$ 272 thousands and in São Paulo at US\$ 437 thousands, with an average cost per participant of US\$ 860 and US\$ 783, respectively.

Recurrent costs responded to 87% of the total costs in Salvador, and 80% of the costs in São Paulo.

The components of demand creation of the PrEP1519 study (through social media and other networks), and peer-counseling time are the main cost categories for PrEP to be fully scaled up in the Brazilian SUS.

## Conclusions

Although the cost per participants in the two Brazilian cities is considerably high, most of these costs are already integrated into the SUS, and at scale, cost per participants tends to decrease substantially.

Demand creation and peer counseling are the elements that would require the greatest cost increase to expand the PrEP program. Nevertheless, it would improve HIV treatment adherence as an added value.

Further analysis is being conducted to estimate the cost per participant when PrEP is offered at scale.

**Table 1.** Financial costs of PrEP in Brazil. PrEP1519 study cities.

Cost category	Salvador		São Paulo	
	Total cost US\$	%	Total cost US\$	%
<b>Set-up costs</b>	<b>15,491</b>	<b>5.7</b>	<b>33,689</b>	<b>7.7</b>
Experts time	6,051	2.2	16,338	3.7
Consultations	2,388	0.9	2,674	0.6
Formative research	4,327	1.6	8,222	1.9
Equipment and materials	1,317	0.5	2,370	0.5
Overheads	1,408	0.5	4,084	0.9
<b>Capital costs</b>	<b>19,185</b>	<b>7.1</b>	<b>51,800</b>	<b>11.8</b>
Furniture	3,651	1.3	9,858	2.3
Equipment (infrastructure: e.g. air conditioning)	2,787	1.0	7,526	1.7
Equipment work (e.g. computer, printer, etc.)	11,990	4.4	32,373	7.4
Equipment laboratory	757	0.3	2,043	0.5
<b>Recurrent costs</b>	<b>237,030</b>	<b>87.3</b>	<b>351,702</b>	<b>80.4</b>
Overheads	41,795	15.4	39,460	9.0
Medical staff (including lab staff)	58,862	21.7	76,549	17.5
Administrative staff	27,049	10.0	48,293	11.0
Demand creation (social media, other networks and peer-counseling time)	24,567	9.0	29,750	6.8
HIV Rapid test	23,489	8.6	123,654	23.8
Other Rapid tests; syphilis and hepatitis	768	0.3	663	0.2
Laboratory tests	43,392	16.0	9,334	2.1
Materials (laboratory)	1,894	0.7	4,670	1.1
PrEP Drugs	2,706	1.0	17,364	4.0
Preventive products (condoms, HIV self tests, etc.)	12,505	4.6	1,964	0.4
<b>TOTAL FINANCIAL COSTS</b>	<b>271,707</b>	<b>100.0</b>	<b>437,191</b>	<b>100.0</b>
<b>Number of participant</b>	<b>316</b>		<b>558</b>	
<b>Cost per participant</b>	<b>860</b>		<b>783</b>	

## Acknowledgment and Funding

We are grateful to aMSM and aTGW participants of the PrEP1519 study. Financial support for this study was provided by UNITAID and the Department of Chronic Conditions and Sexually Transmitted Infections (DCCI) of the Brazilian Ministry of Health.

PRESENTED AT AIDS 2022 - THE 24TH INTERNATIONAL AIDS CONFERENCE MONTREAL, CANADA

AIDS 2022  
29 July – 2 August

