



**HPTN**

HIV Prevention  
Trials Network

# **How best can Latin America prepare to engage in new HPTN studies? What are the gaps?**

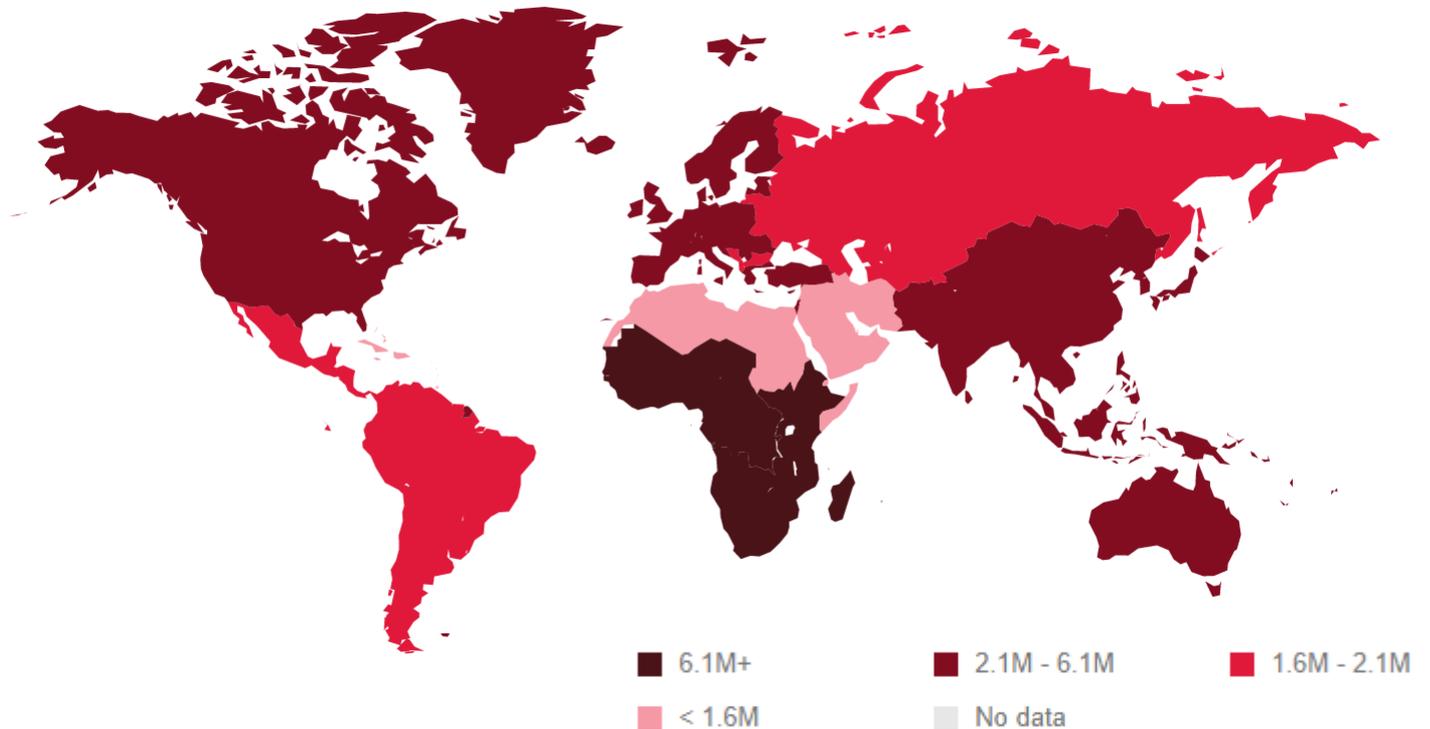
**Beatriz Grinsztejn, MD, PhD  
Oswaldo Cruz Foundation (FIOCRUZ)  
Rio de Janeiro, Brazil  
March 2018**

# HIV epidemic in Latin America

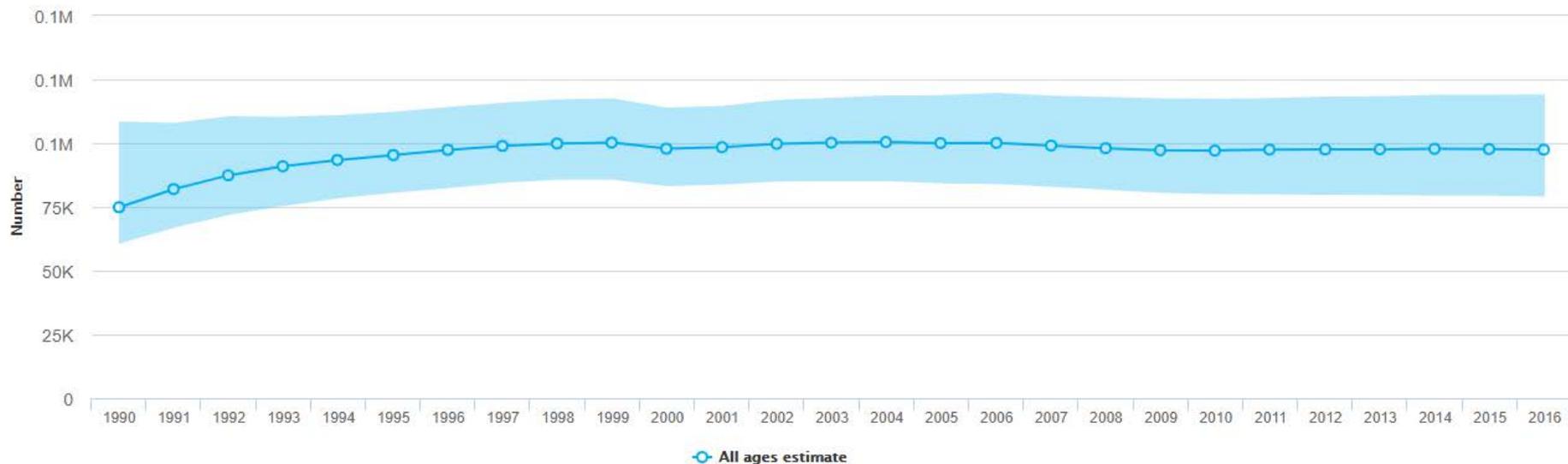
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In 2016,  
**1.8 mi**  
people living  
with HIV.

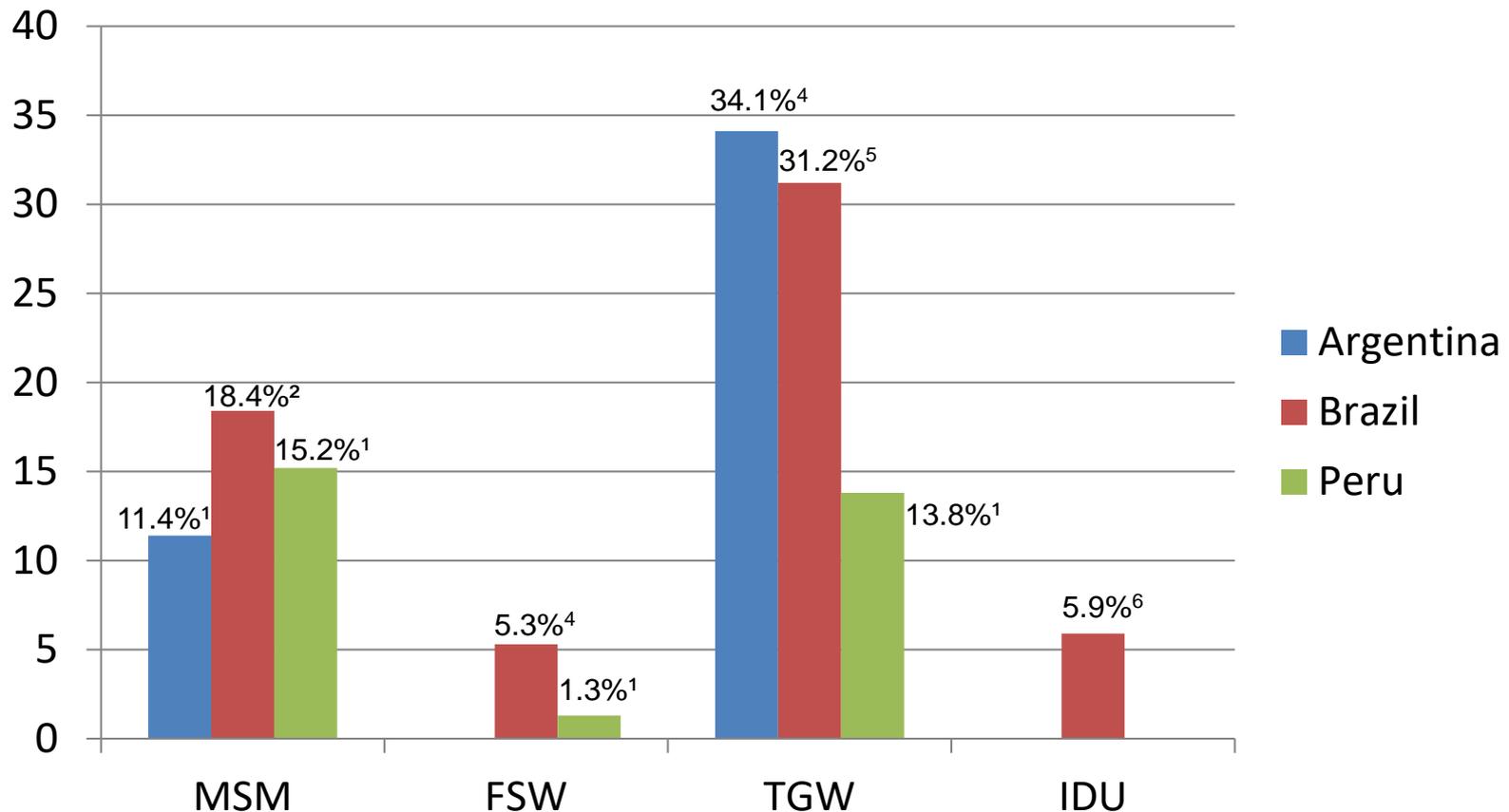
**97,000**  
new infections  
per year.



# New HIV infections in Latin America

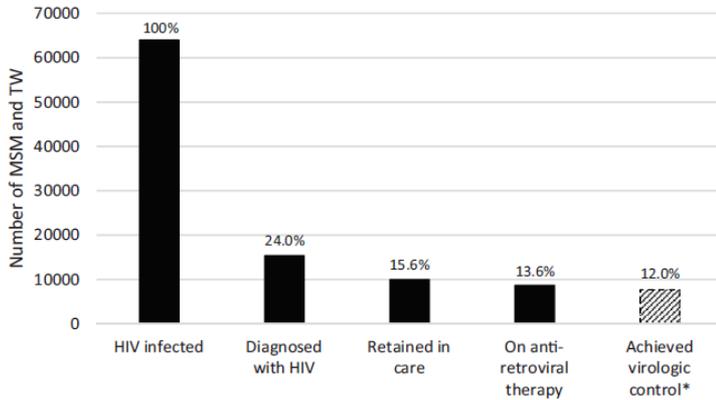


# HIV epidemic in Latin America

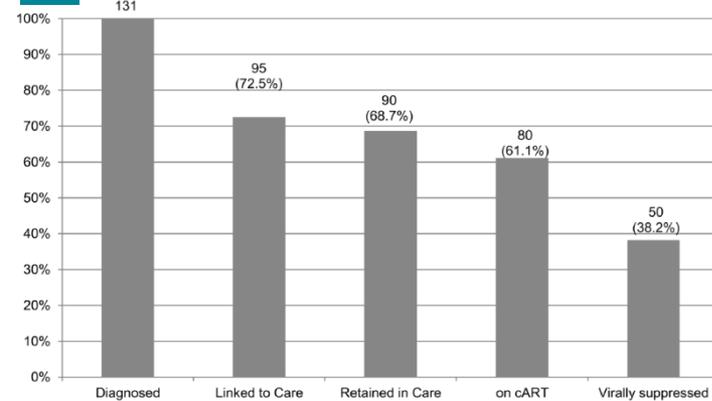


# Treatment cascade in key populations

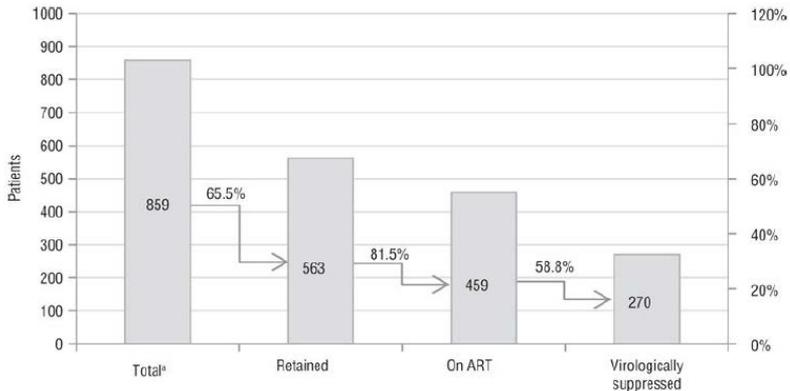
## 1 MSM and TGW in Peru



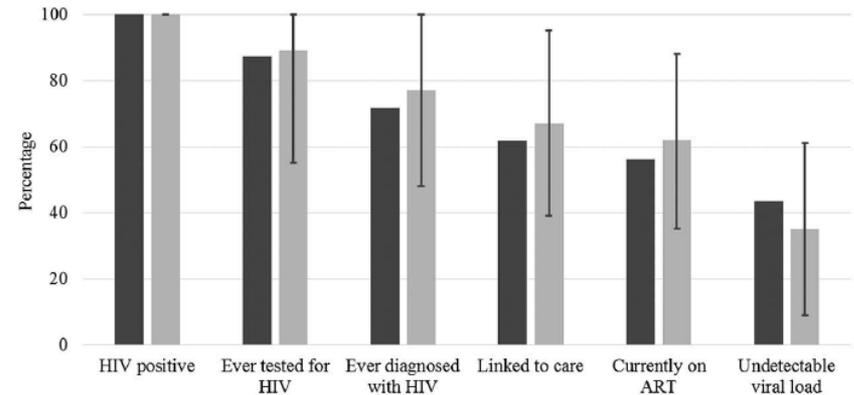
## 2 MSM in Brazil



## 3 MSM and TGW in Argentina

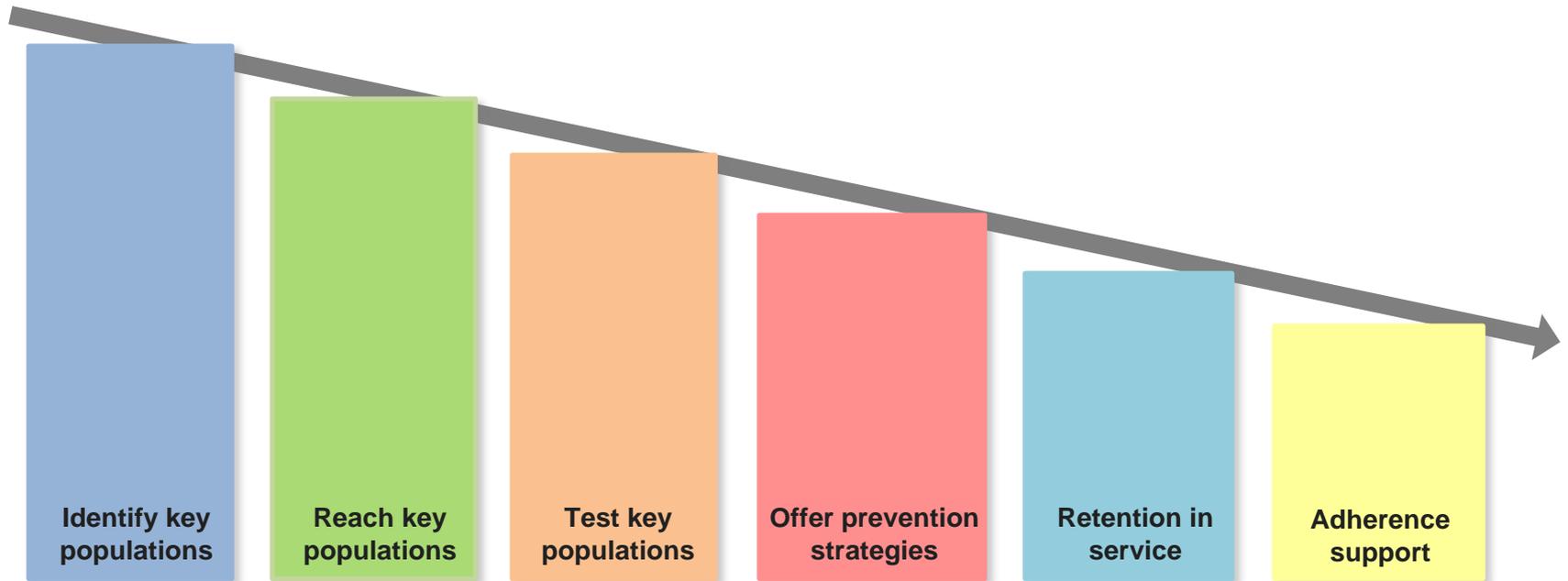


## 4 TGW in Brazil



# Prevention for key populations

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## Recruitment strategies

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- Opportunity to meet people “where they are at” including via social and sexual networking apps
- Apps (Grindr, Hornet, others) and other social media use - what data can best guide us
- But...not as straightforward and easy as it looks
- What about the to the most vulnerable hardest to reach among hard-to-reach populations?
- Ist it useful for TGW?

# HIV testing in key populations

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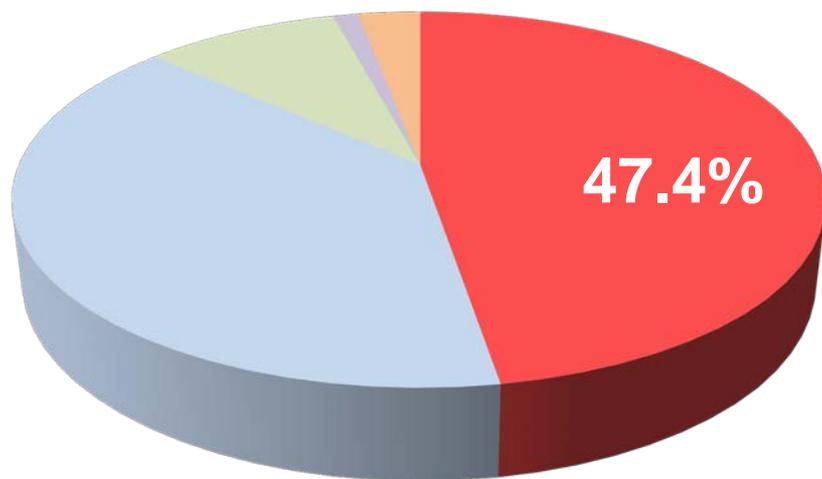
- Low uptake of HIV testing
  - Never tested for HIV:
    - 20% of Peruvian MSM
    - 29% of Brazilian TGW
    - Repeated testing: only 39% in Peruvian MSM and TGW
- Late diagnosis continues to be an issue in the region
- Unknown HIV status
- Stigma and descrimination
- High acceptability of self-testing among MSM and TGW in Peru, Argentina and Brazil.
- Can peer delivered self testing play a role in recruiting high risk individuals to PrEP studies?

Lee et al, 2015; Grinsztejn et al, 2017

Bustamante et al, 2017; Pando et al, 2017; Volk 2016, Torres et al, 2018

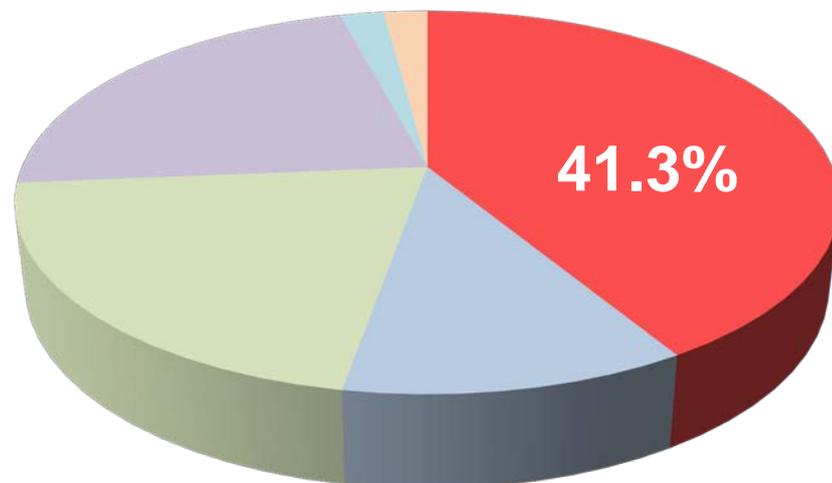
# HIV testing in key populations

Best place for testing



■ At home      ■ Health care provider      ■ Pharmacy  
■ Community center      ■ Other

Best way to obtain self-test



■ Internet (home delivery)      ■ Internet (pick somewhere)  
■ Pick up at a pharmacy      ■ Pick up at a health care provider  
■ Pick up at NGO      ■ Other

## HIV risk perception in key populations

- Low self-perceived risk for HIV as a barrier to HIV testing. (Lee et al, 2015)
- Similarly, low rate of self-perception of high HIV risk was observed among Peruvian MSM that attended STI clinics.
- Peruvian MSM: 23.0% considered themselves at high HIV risk. (Vargas et al, 2018)
- An online questionnaire evaluated Brazilian MSM that used social apps to sexual encounters. Although most of the MSM of the study scored as high HIV risk in the *The HIV Incidence Risk for MSM Scale*, only 21.4% had high HIV risk perception (Torres et al, 2018)

# Assisting with accurate HIV risk assessment

The screenshot shows the 'SEX PRO' interface. At the top left is the 'SEX PRO' logo. To its right is a 'LOG OUT' button. Below the logo is the heading 'MY SEX PRO SCORE' and a large, colorful gauge chart. The gauge is divided into segments of red, orange, yellow, and green, with a black needle pointing to a 'CURRENT SCORE' on the left side. The right side of the gauge is labeled 'YOUR GOAL'. Below the gauge, there are labels for 'Lower levels of protection' and 'Higher levels of protection'. To the right of the gauge is the heading 'What is the Sex Pro score?' followed by several paragraphs of explanatory text. At the bottom left of the interface is an information icon and the text 'How is the Sex Pro score calculated?'. At the bottom center is a blue 'Let's Go' button.

**SEX PRO** LOG OUT

## MY SEX PRO SCORE

### What is the Sex Pro score?

We'll be asking you questions about yourself and your behaviors over the last 3 months. Your answers will be converted into a score that tells you how much your behaviors are promoting your sexual health (your Sex Pro score).

You'll be getting a Sex Pro score from 1-20. Higher numbers mean higher levels of protection.

You'll get a chance to think about how high you'd like your score to be, and then get a chance to see how changing your behavior can change your score.

Remember that this is a relative score. So, even with a perfect 20 (strongest protection), you could still become HIV infected. But, it means that you are doing a lot to be sure you stay negative.

Your counselor can answer any questions you have about the score, and you'll get to decide whether you want to share your specific answers with your counselor at the end of the Sex Pro questions.

You can only get a meaningful score if you provide honest answers to these questions.

Lower levels of protection | **CURRENT SCORE** | Higher levels of protection

**YOUR GOAL**

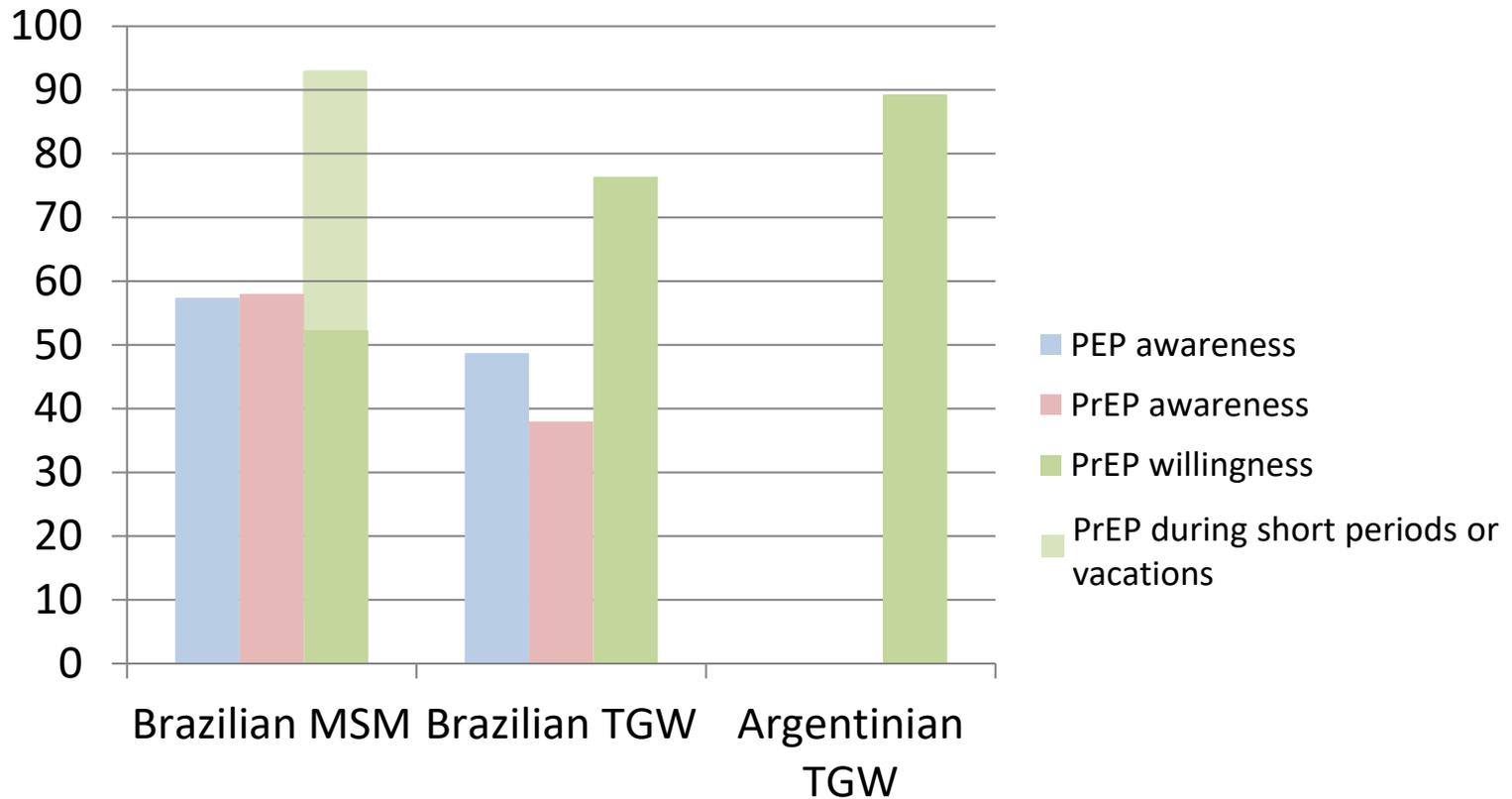
**Let's Go**

**i** How is the Sex Pro score calculated?

- Interactive, online HIV risk assessment tool for MSM using data from several large cohorts of MSM.
- Calculates HIV personalized risk score (scale 1-20, with positive frame).

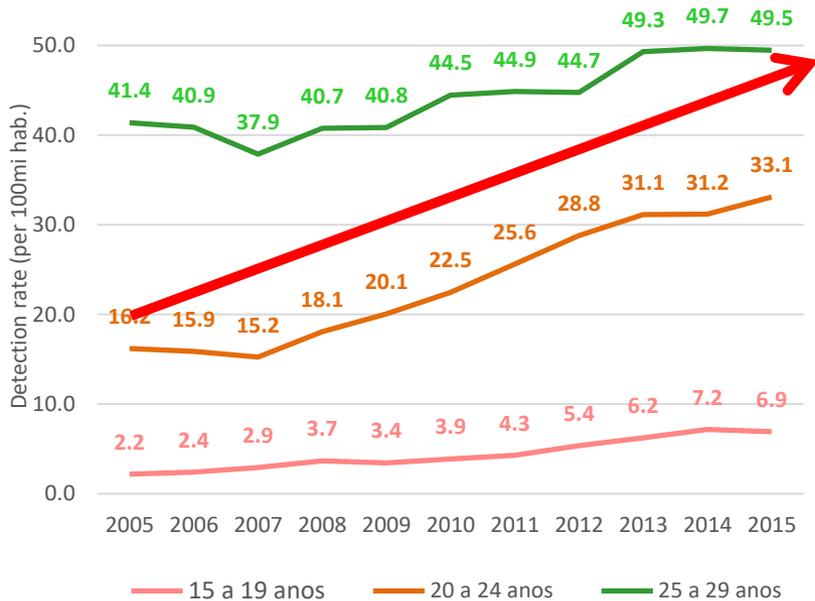
- Piloted in 240 MSM in SF, NY, Lima, Rio de Janeiro
- Found to be easy to use and desirable, esp. young MSM
- Included to be validated for LA 083 sites

## PrEP awareness and willingness in key populations

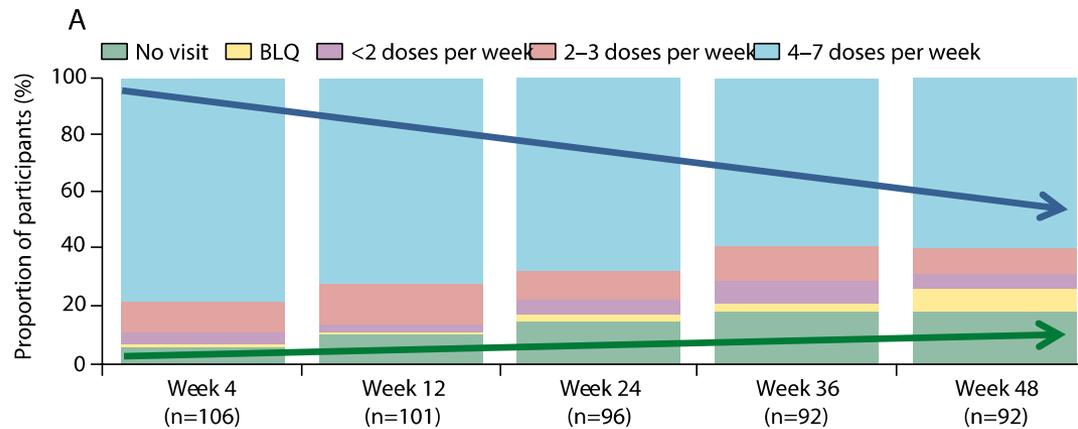


# HIV prevention among young men

**HIV detection rate among young men**



**PrEP engagement by visit among young men aged 18-24 years, PrEP Brasil Project**



Source: Grinsztejn et al. Lancet HIV 2018.

Source: Brazil, 2016.

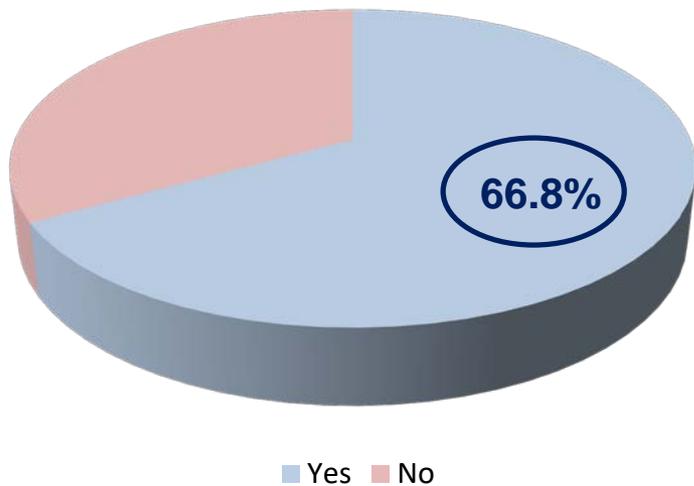
## PrEP challenges in transgender women

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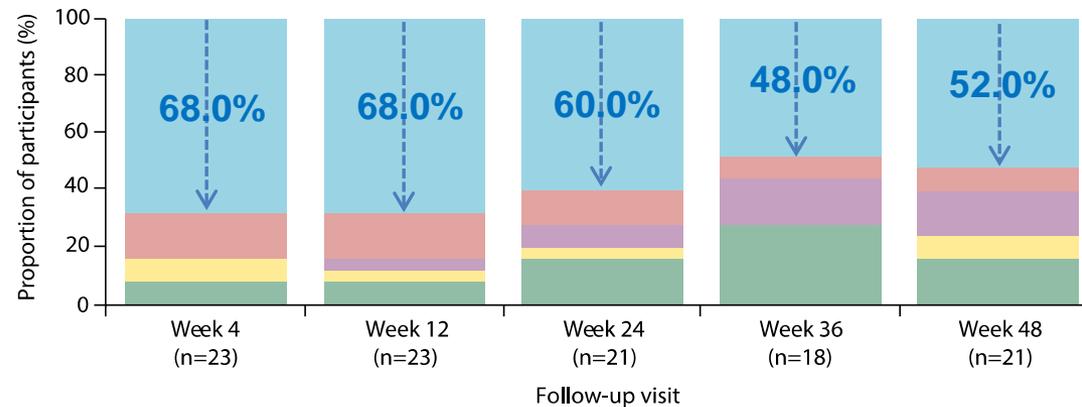
- Medical and research mistrust emerged as key, multidimensional and interrelated barriers to PrEP acceptability including:
  - Mistrust of health care systems and providers
  - Wariness of research focused on TGW
  - Suspicions of PrEP efficacy and
  - Fear of potential adverse effects.
- Disillusionment with:
  - Experimental trial designs (blinded allocation to placebo versus study drug)
  - Perceived drug effects (questions of Truvada efficacy), and
  - Study staff (mistrust of reported results, lack of information on side effects or potential interactions with hormone therapy)

# HIV prevention among transgender women

PrEP eligibility among transgender women in the *Transcender Study* in Rio de Janeiro, Brazil



PrEP engagement by visit among transgender women, PrEP Brasil Project



Source: Grinsztejn et al. Lancet HIV 2018.

Source: Jalil et al, 2018. Data not published.



# TransPrEP: Social Network-Based PrEP Adherence for Transgender Women in Peru

UCLA



THE FENWAY INSTITUTE



Ministério da Saúde

**FIOCRUZ**

Fundação Oswaldo Cruz

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# TECNOLOGIAS DISPONÍVEIS E EM DESENVOLVIMENTO

Preservativo  
feminino



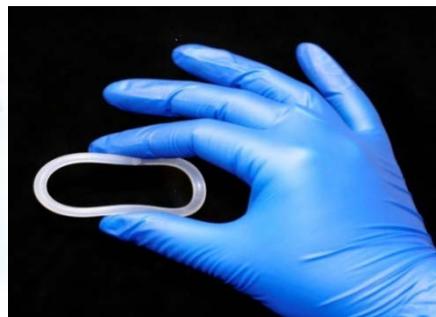
Preservativo  
masculino

Baixas taxas de uso consistente e dificuldade de negociação

Drug  
combinations



Drug/device  
combinations



Injetáveis  
ART, mAbs , HC



Electrospun  
Nanofibers/Films

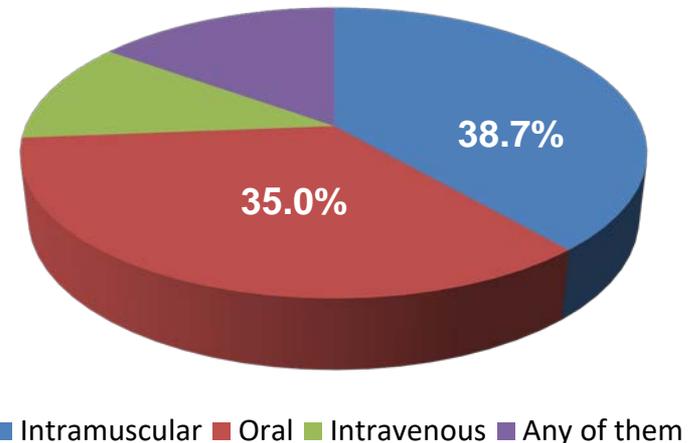


*The future of MPTs...protection from HIV, other STDs, +/- pregnancy*

## PrEP preferences in LA

- Long acting-extended release technology is changing rapidly, with new approaches likely to be available for clinical testing soon:
  - Implants, transdermal microneedle patches, long-acting oral formulations
- Long-acting injectable PrEP as the preferable option. (Meyers et al, 2014; Parsons et al, 2016)
- One third of MSM taking oral PrEP would change for long-acting injectable PrEP (John et al, 2017)
- Scarce Latin-american published data.
- Benefit from the large studies to better understand preferences

Preferences on route of PrEP administration among transgender women in *Transcender* study, Rio de Janeiro, Brazil



# Gaps and Opportunities

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- How to reach the unreachable and most vulnerable to make study results valuable for the region?
- Formative research (including modalities of PrEP and social media)
- Adolescents (in adult clinical trials or adolescent-specific trials?)
- LA Transgender women deserve dedicated PrEP studies
- Alcohol and stimulants use in the HPTN research agenda for LA
- Can we take advantage of the opportunity to also evaluate strategies for STI prevention in the region?



**OBRIGADA!**