

UPDATES FROM AIDS 2022

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AIDS 2022 Knowledge Toolkit

Highlights of 24th International
AIDS Conference

Produced by **NAM aidsmap** and **IAS – the International AIDS Society**

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Vaccine and cure research

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Fifth person free of HIV after stem cell transplant

- ▶ The “City of Hope patient” is named after the cancer centre in Duarte, California, where he was treated.
- ▶ He received a stem cell transplant from a donor with the rare delta-32 CCR5 mutation to treat leukaemia.
- ▶ There have been four previous cases of cure following stem cell transplants: Timothy Ray Brown (Berlin); Adam Castillejo (London); “Marc” (Düsseldorf); the “New York patient”.



Jana Dickter of the City of Hope cancer centre at AIDS 2022.
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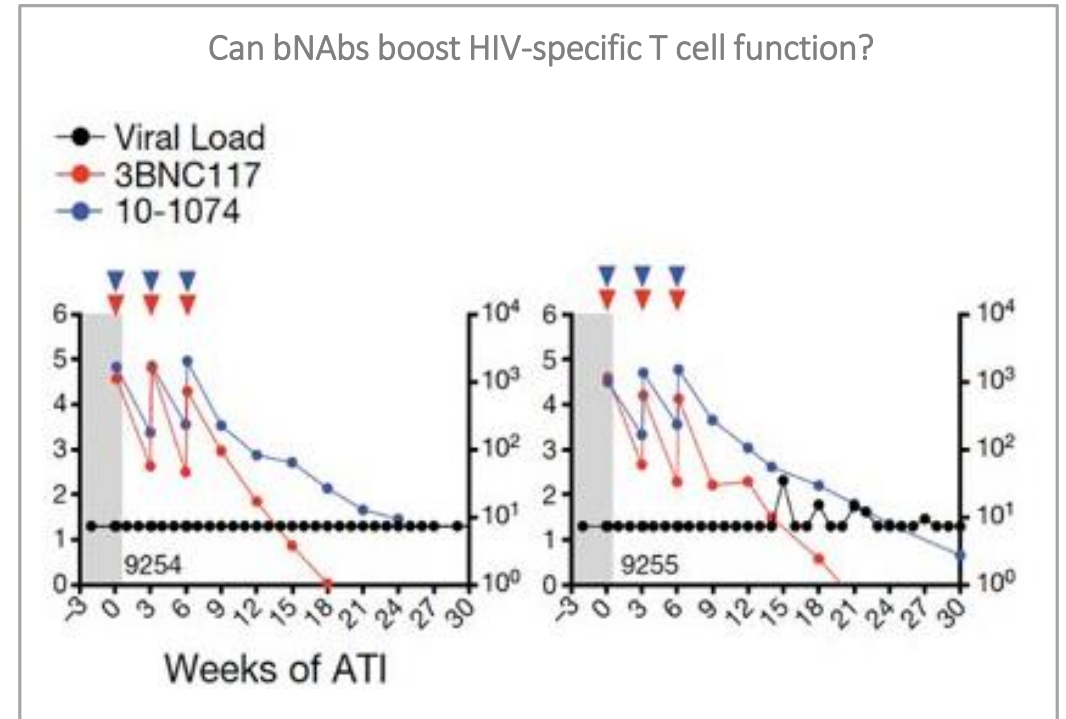
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City of Hope Patient

<https://www.youtube.com/watch?v=L0DtIW9DYyU>

Broadly neutralizing antibodies

- ▶ Broadly neutralizing antibodies (bNAbs) produce lasting effects in other parts of the immune system.
- ▶ In a 2018 study, **nine of 11 people** given two bNAbs (3BNC117 and 10-1074) maintained viral undetectability off ART for an average of five months. Two were undetectable for over seven months.

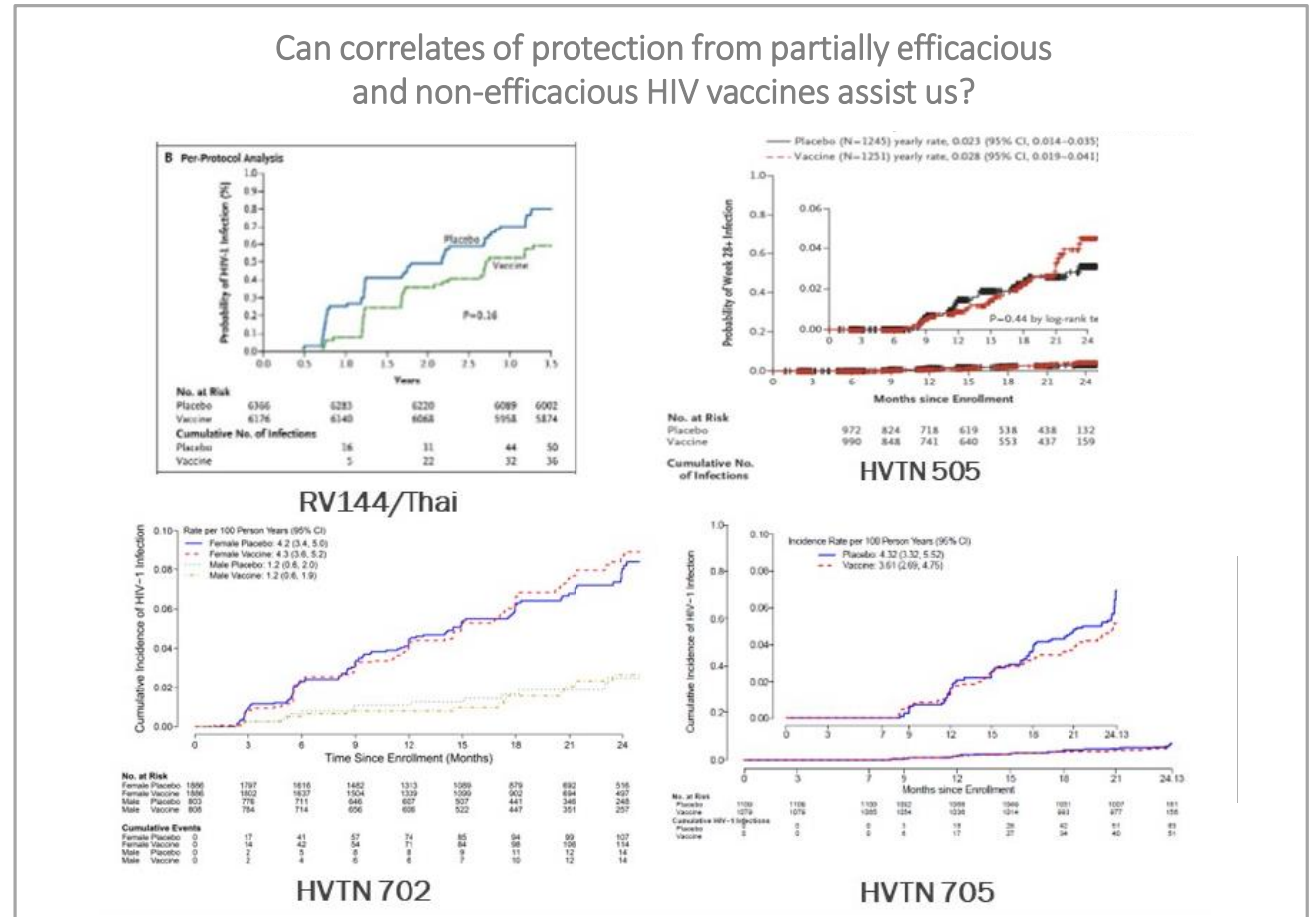


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HIV vaccine research

- ▶ Only one Phase III vaccine trial has found marginal efficacy (RV144).
- ▶ Only one Phase III trial is ongoing (Mosaico).
- ▶ Glenda Gray commented: “It takes 30-100 times more neutralizing antibodies to inhibit HIV than SARS-CoV-2.”



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Ending advanced HIV disease-related mortality

- ▶ 650,000 people died in 2021 due to advanced HIV disease-related causes: one every minute.
- ▶ Most people diagnosed with advanced HIV disease are re-engaging in care after treatment interruption.
- ▶ Mortality is high in people with advanced HIV disease in their first three months on HIV treatment.
- ▶ The most common causes of death are **tuberculosis (TB) and cryptococcal meningitis**.



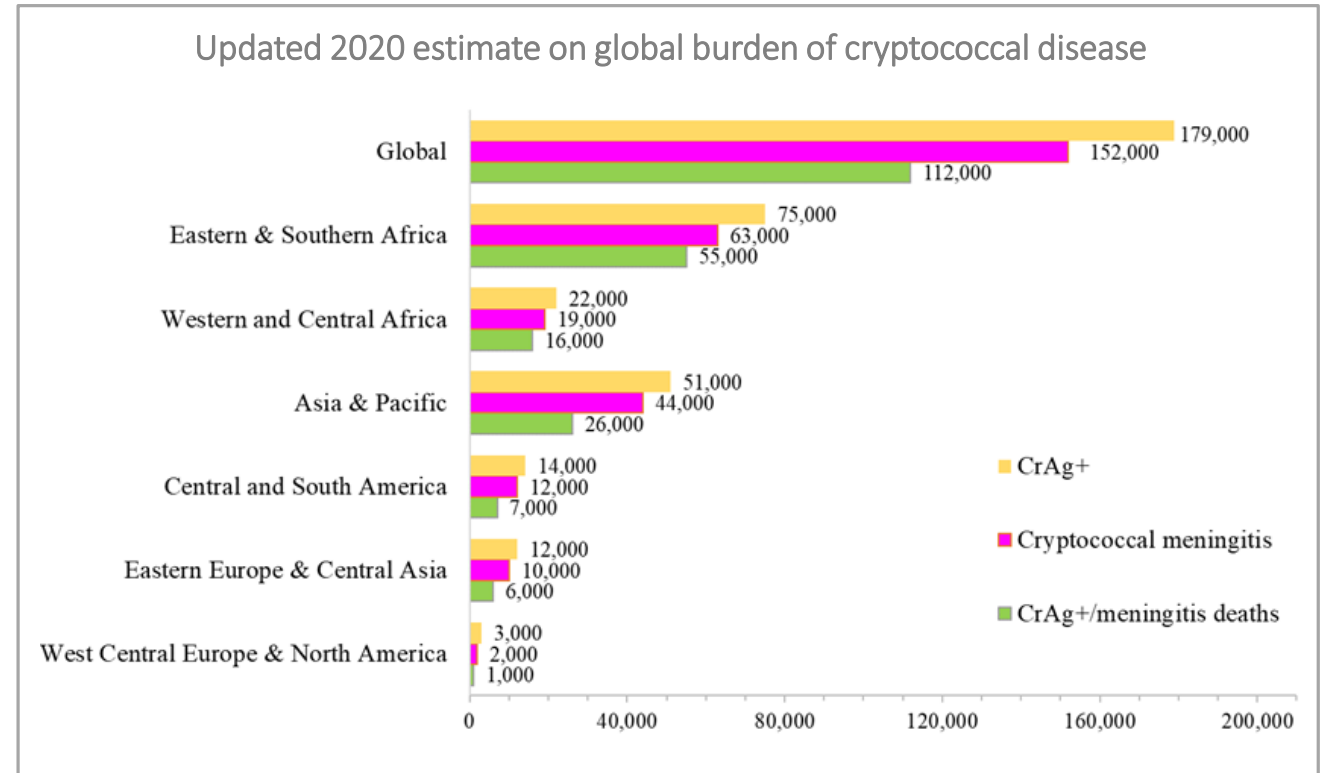
South African activist Vuyiseka Dubula protesting lack of action on tuberculosis and cryptococcal meningitis at AIDS 2022. Photo©Steve Forrest/Workers' Photos/IAS.

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Treatment of cryptococcal disease

- ▶ Cryptococcal meningitis accounts for 15% of AIDS-related deaths.
- ▶ Revised WHO guidelines on treatment of cryptococcal disease were launched at AIDS 2022.



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Taking antibiotic after sex to reduce STIs

- ▶ The DoxyPEP study recruited 501 gay and bisexual men and trans women.
- ▶ 327 were HIV-negative people using PrEP (regular medication to prevent HIV) and 174 were people living with HIV.
- ▶ Two-thirds were given doxycycline to take after sex as post-exposure prophylaxis (PEP).
- ▶ They were told to take a single dose of doxycycline (200mg) as soon as possible and no more than 72 hours after condomless sex.

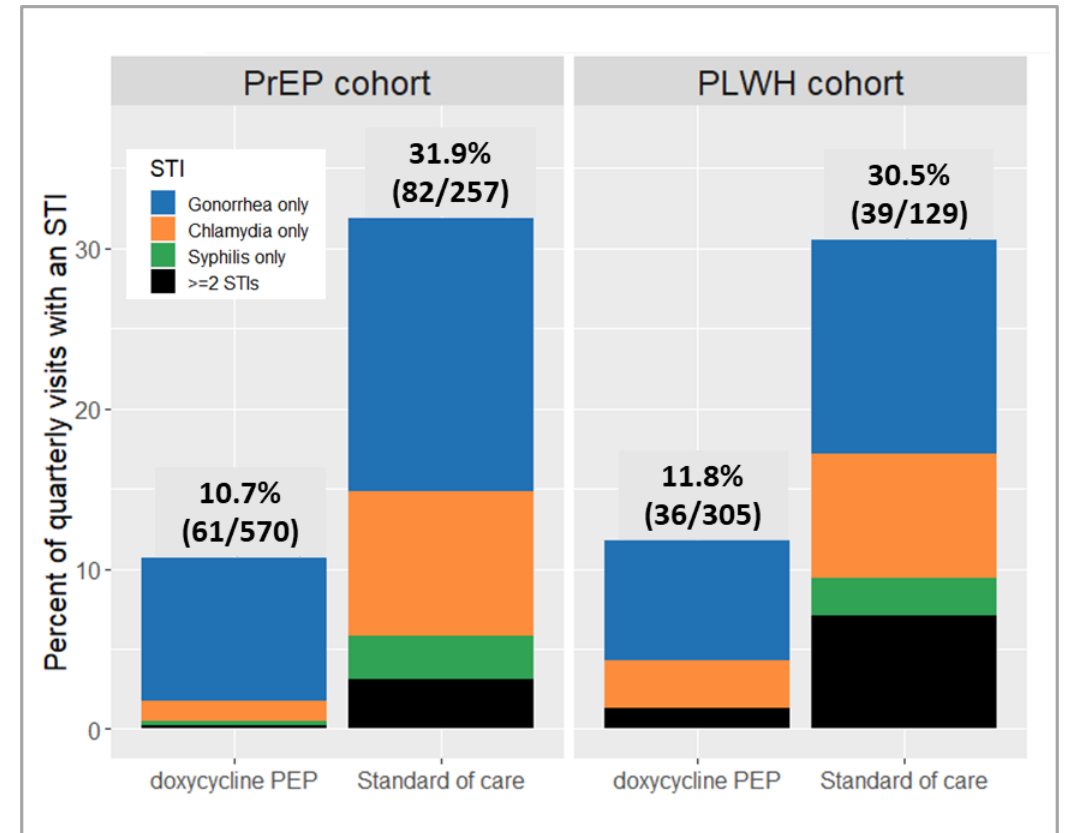


Annie Luetkemeyer of the University of California San Francisco at AIDS 2022.
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- ▶ The incidence of gonorrhoea, chlamydia and syphilis was measured and a significant reduction was seen in all three STIs compared with the standard of care.
- ▶ Overall, doxycycline taken after sex reduced STIs by 66% in HIV-negative participants (PrEP cohort) and by 62% in participants with HIV.



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Antibiotics to prevent STIs

<https://www.youtube.com/watch?v=3RDlaPnXwPY>

Multi-country outbreak of monkeypox

- ▶ Monkeypox is endemic in West and Central Africa.
- ▶ Since May 2022, an outbreak has been documented in numerous non-endemic countries, particularly in Europe and North America, mainly affecting men who have sex with men.
- ▶ Lesions are often anogenital and around 10% of people with monkeypox require hospital treatment.



Meg Doherty from WHO at AIDS 2022.
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- ▶ Public health responses in affected countries have been mixed to date.
- ▶ The outbreak continues to grow and expanded vaccination programmes are urgently required.
- ▶ Community protests at the conference called for vaccine equity.



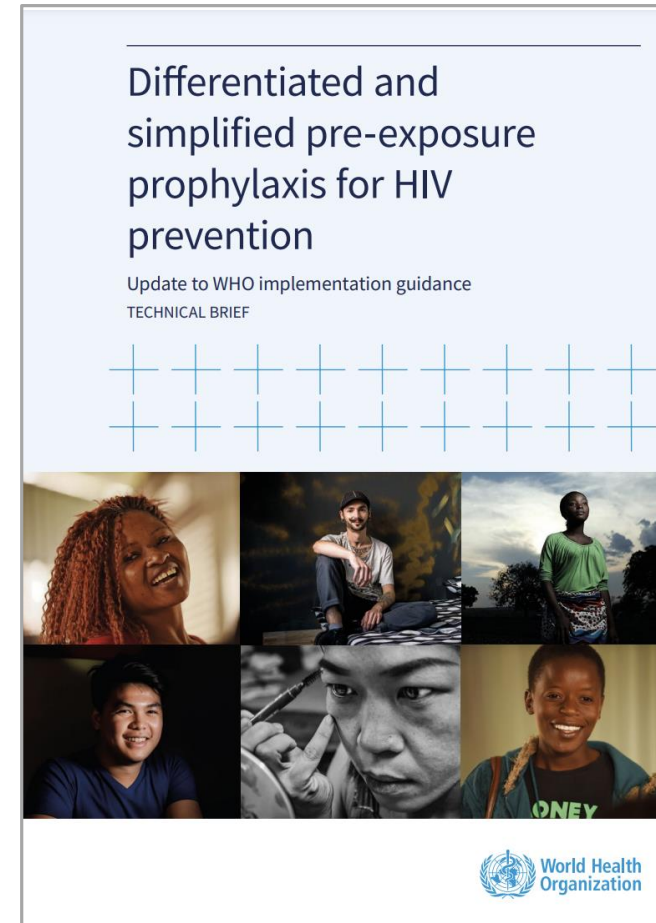
Protestors at AIDS 2022 demanding increased access to monkeypox vaccines and treatment. Photo by Liz Highleyman

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Improving PrEP service delivery

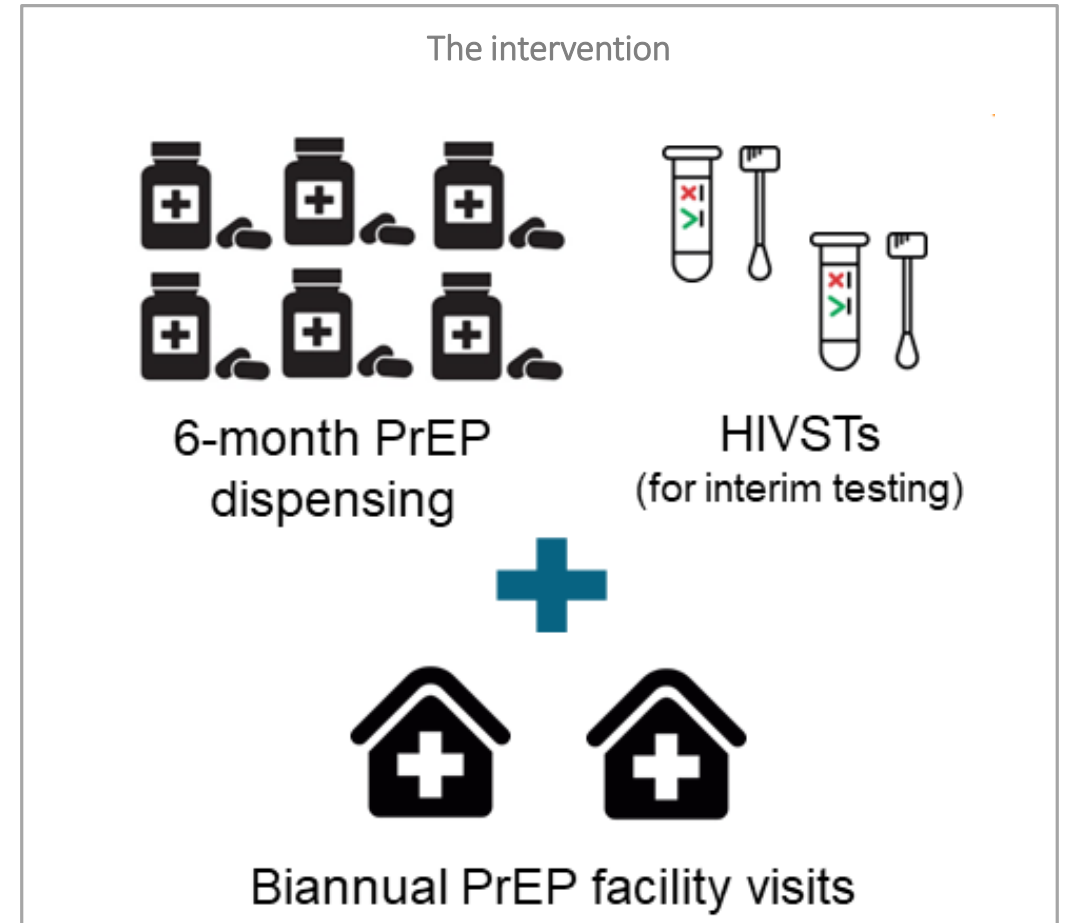
- ▶ WHO launched a technical brief on differentiated and simplified PrEP.
- ▶ Differentiated service delivery means adapting services to the client's needs and preferences, including:
 - When – the frequency of visits
 - Who – the service provider
 - Where – the location of services
 - What – the package of services.



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- ▶ In Kenya, PrEP is currently delivered through HIV clinics, with quarterly visits including HIV testing.
- ▶ A randomized implementation trial tested a model of six-month PrEP dispensing, with HIV self-testing between biannual clinic visits.
- ▶ 495 participants were randomized to either the intervention (PrEP refills to cover the six months until the next clinic visit, with two HIV self-tests provided) or standard of care.



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- ▶ After 12 months, in both groups, 70% of participants had tested for HIV in the past six months.
- ▶ There was no difference in PrEP continuation between groups (60% in the intervention group refilled PrEP at 12 months compared with 63% in the standard-of-care group).
- ▶ Among women who enrolled on their own, rather than in a couple, the intervention significantly increased PrEP adherence (35% vs 18%).

Outcomes at 12 months



- Any HIV testing in the past 6 months, **at 12 months**
- Testing ≥ 3 times **since enrollment**



- Refilled PrEP at **12 months**
- Refilled PrEP **at 6 and 12 months**

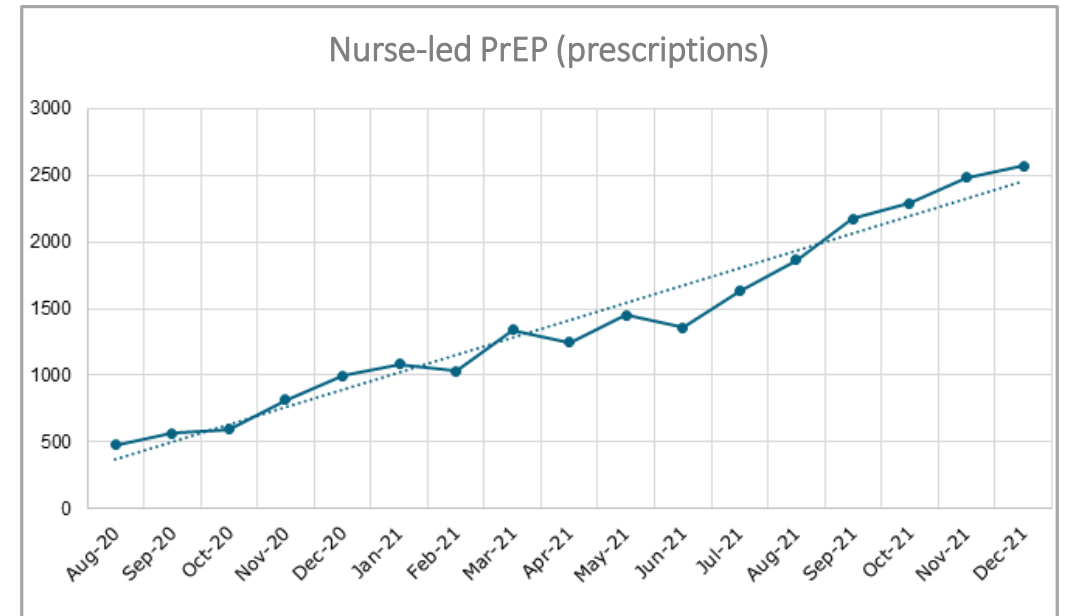


- Any TFV-DP **at 12 months**
- Any TFV-DP **at 6 and 12 months**

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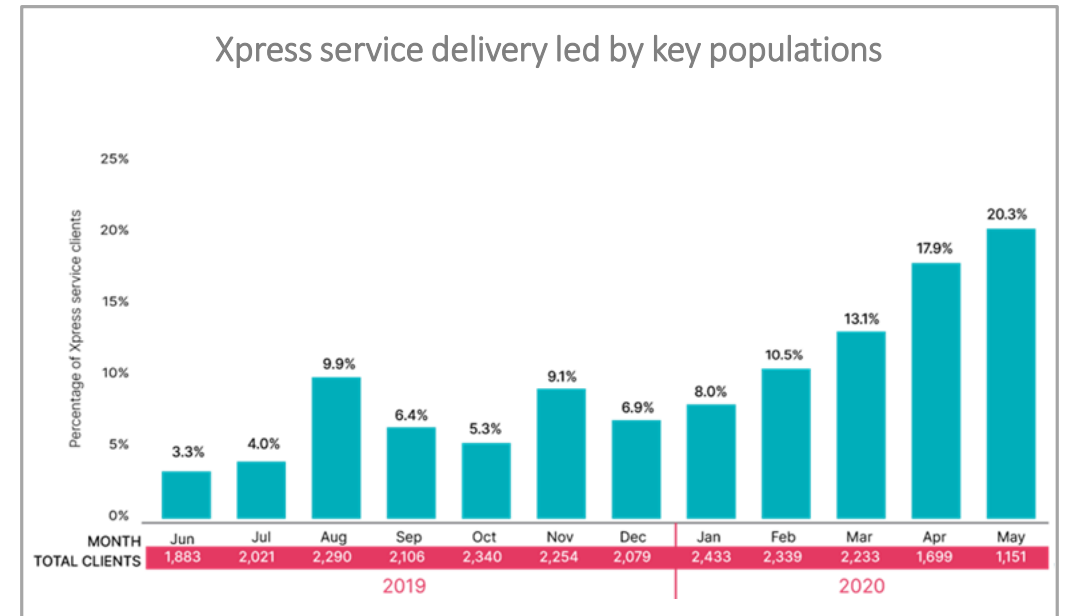
- ▶ In Brazil, in 2020, nurses were trained and supported to prescribe PrEP.
- ▶ Nurse-led prescriptions have significantly increased access for vulnerable populations.
- ▶ 2.1% of nurses' prescriptions were for sex workers compared with 0.8% of doctors' prescriptions.
- ▶ 13% of nurses' prescriptions were for people who use drugs compared with 7% of doctors' prescriptions.



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- ▶ In Thailand, many PrEP services are led by key populations.
- ▶ These services include the offer of testing for syphilis, gonorrhoea, chlamydia and hepatitis C.
- ▶ In the Xpress model of care, a risk assessment is done online, with counselling by video or telephone call. The client attends only to take a specimen for testing.
- ▶ The model has demonstrated very high client satisfaction.

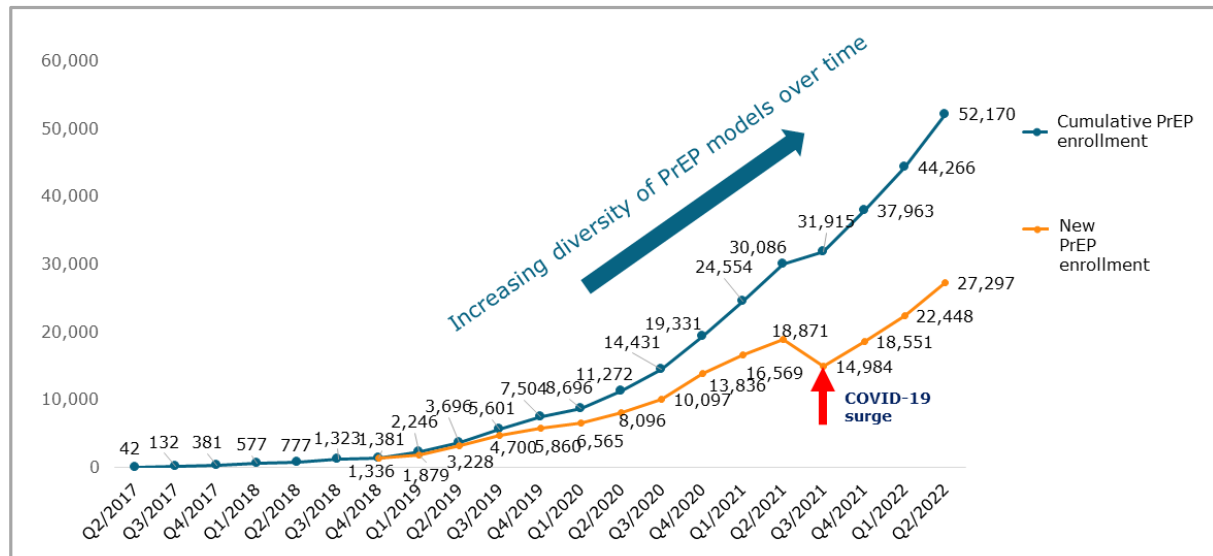


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- ▶ In Vietnam, differentiating where PrEP is offered has led to increased scale up.

- ▶ In one province, 32% of clients started PrEP at public HIV clinics, 32% at key population-led clinics, 23% through telehealth, 10% at private clinics, and 2% at mobile services.



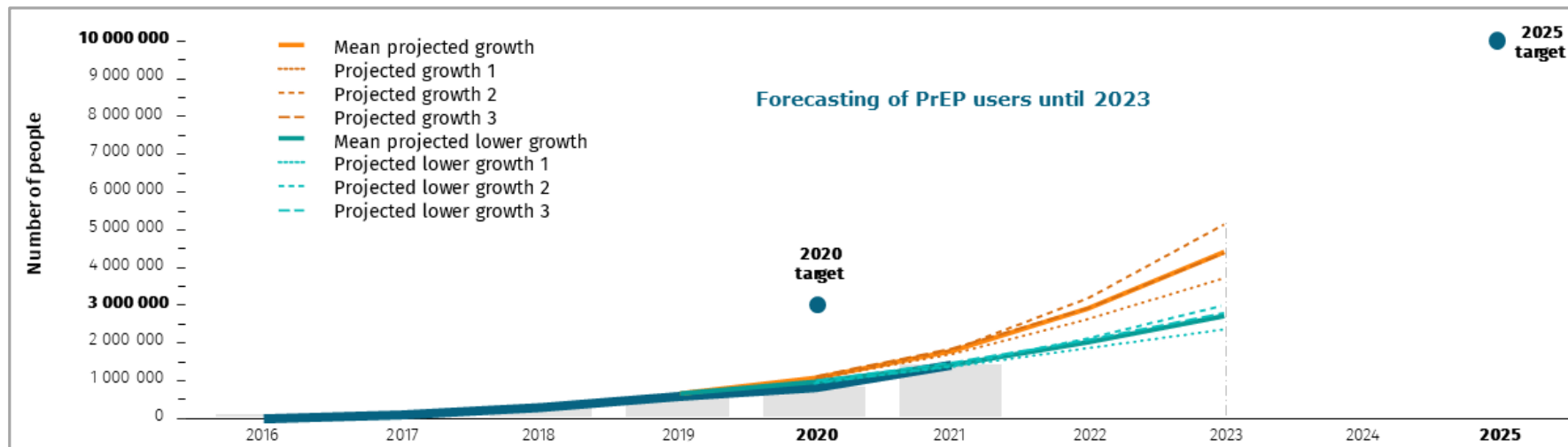
Quarterly growth in PrEP uptake nationwide

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Introducing long-acting PrEP

- ▶ Many people who could benefit from oral PrEP do not have access to it.
- ▶ In 2020, the number of people using oral PrEP was just 28% of the target of 3 million in low- and middle-income countries.
- ▶ Daily PrEP is not feasible for everyone. Long-acting PrEP has the potential to address some of the challenges.



PrEP usage, forecasting and targets

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CAB-LA - Six injections a year can prevent HIV -1

- An injection every two months of the antiretroviral cabotegravir is the most effective way to prevent HIV the world has ever seen.
- Two large clinical trials conducted among gay and bisexual men, transgender women and cisgender women found that those who received cabotegravir injections were about 80% less likely to contract HIV than those taking the daily HIV prevention pill.
- The Unblinded phase of HPTN 084 showed continued superior efficacy with overall 89% reduction in HIV incidence with injectable LA Cabotegravir for PrEP vs oral TDF/FTC.

Long-acting injectable HIV treatment in practice

- ▶ Long-acting injectable HIV treatment could enable discreet, less frequent dosing and could be targeted at people who have difficulty with adherence to oral medication.
- ▶ Barriers to uptake include frequent clinic visits, injection-site reactions and drug interactions. It also cannot be withdrawn if there is toxicity.
- ▶ At a system level, there are likely to be fewer treatment failures and hospitalizations and lower healthcare costs. However, there will be training requirements for staff, increased medication costs and the need for cold storage.

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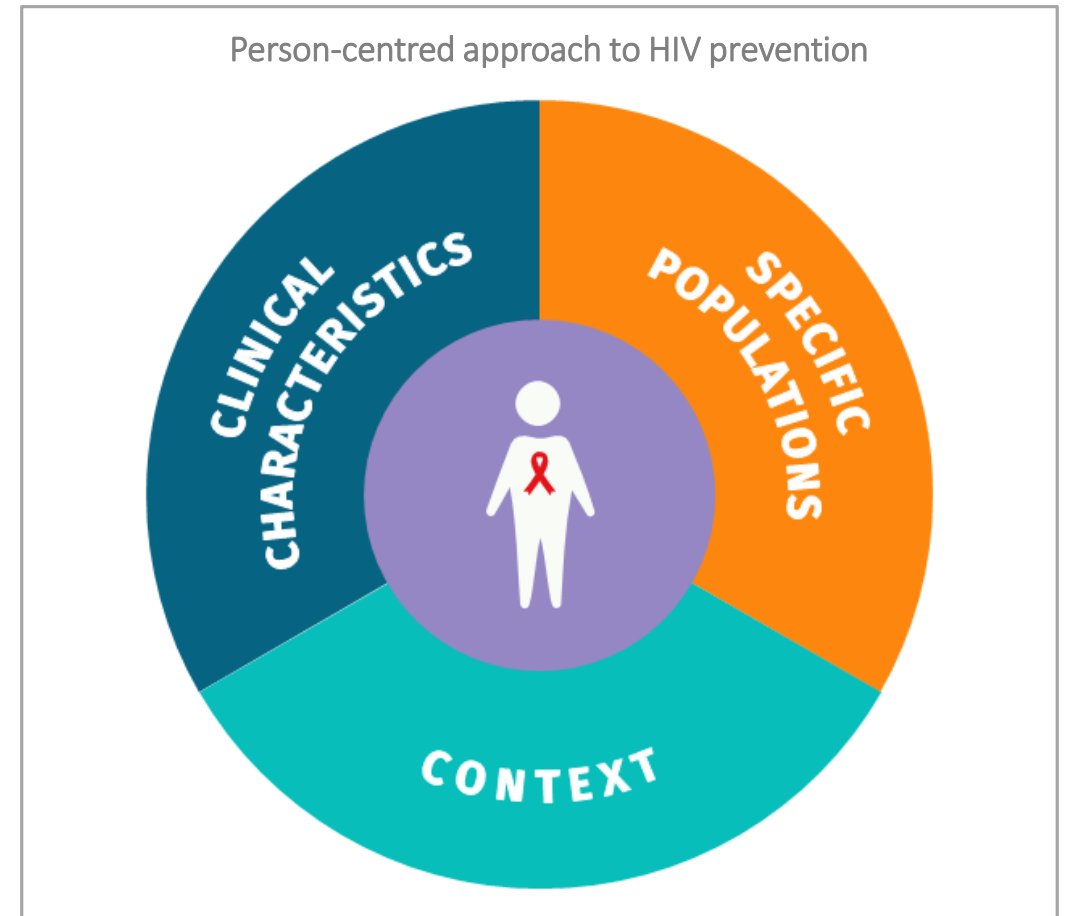
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- ▶ Some populations may particularly benefit from long-acting treatment, including people with psychiatric conditions, people in prison or care settings, and homeless people.
- ▶ There are few data available on the expectations of these populations.
- ▶ Some studies are underway, looking at implementation of long-acting treatment in real-world settings and among people who are not yet virally suppressed.
- ▶ Pedro Cahn told the conference: “Nobody should be left behind in this new treatment paradigm.”

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- ▶ The dapivirine vaginal ring and injectable cabotegravir will be available in more countries soon.
- ▶ Open-label extension studies have shown more use of the vaginal ring than in Phase 3 trials, and modelling data suggest greater risk reduction.
- ▶ Implementation studies will be vital in understanding barriers to roll out and how best to integrate products into health systems.

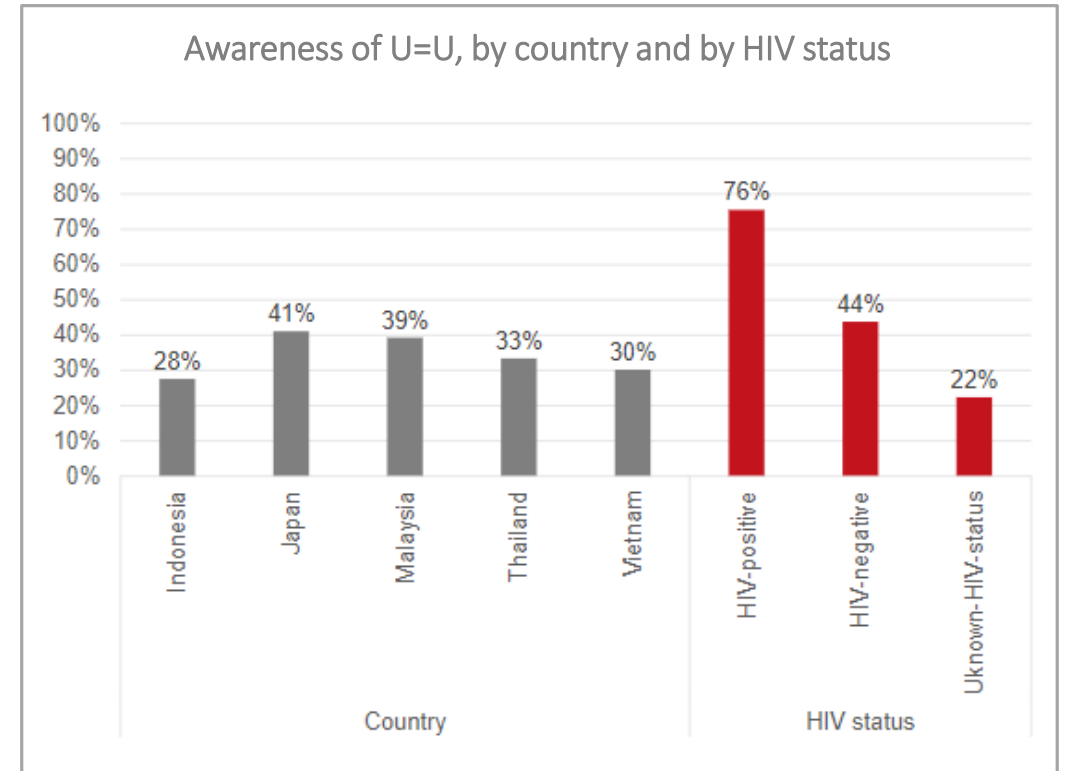


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Integrating U=U into HIV care

- ▶ An online survey investigated awareness of Undetectable = Untransmittable (U=U) among gay, bisexual and other men who have sex with men in Asia.
- ▶ From May 2020 to January 2021, it recruited 15,872 participants.
- ▶ 6.8% were HIV positive, 46.2% HIV negative, and 47% of unknown status.
- ▶ 35.9% were aware of U=U, 44.8% had never heard of it, and 19.3% were not sure.



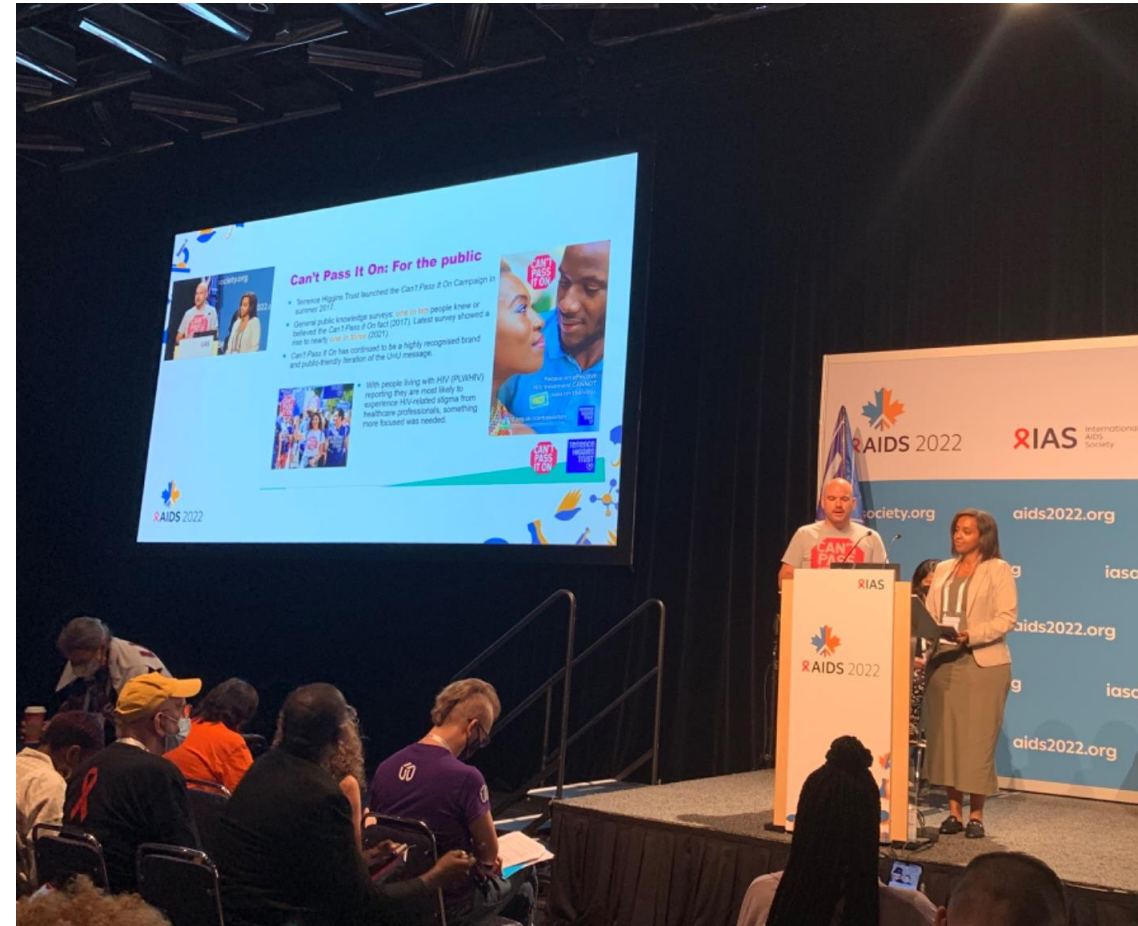
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- ▶ Several presentations explored challenges communicating the U=U message in healthcare settings.
- ▶ Research in Canada found that sexual health practitioners had difficulty communicating the notion of “zero risk”.
- ▶ A UK organization has developed free online training modules for health professionals to support them to confidently communicate U=U with their clients.

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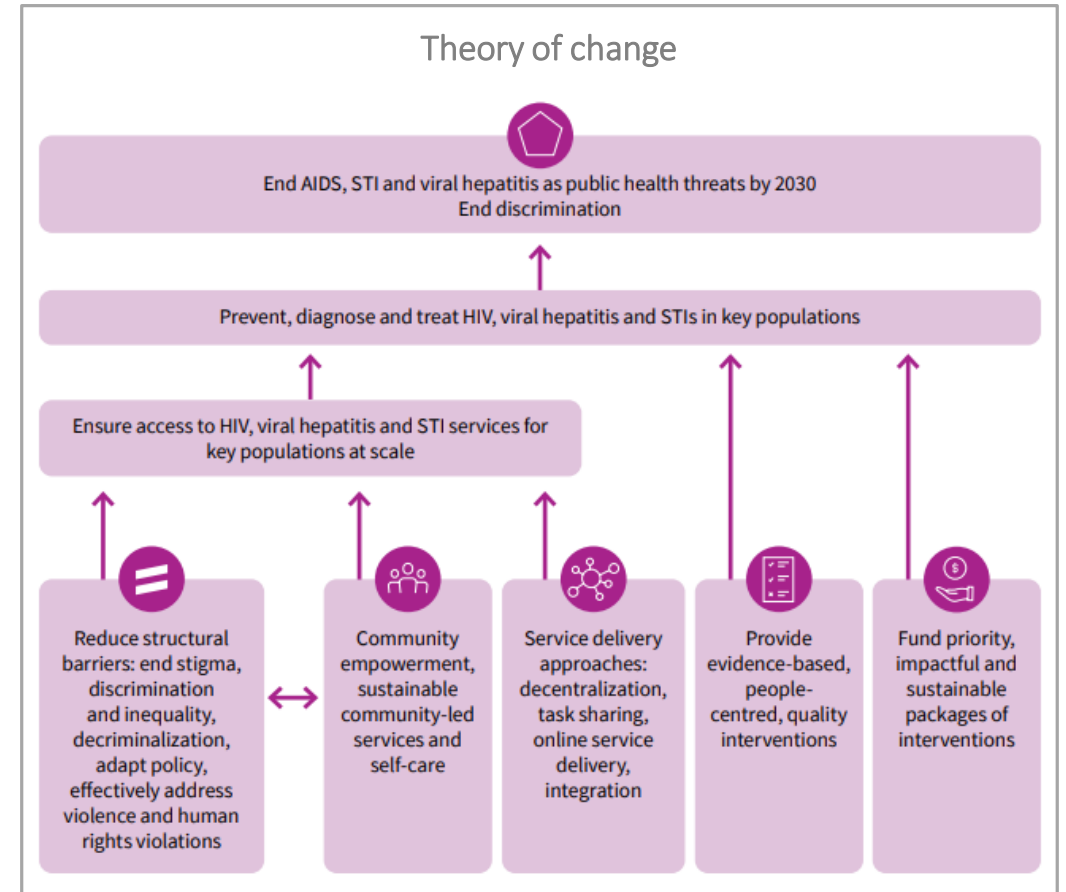


Richard Angell and Chamut Kifetew from the Terrence Higgins Trust at AIDS 2022. Photo by Matthew Hodson

Communities at the centre

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- ▶ New WHO guidelines were launched for HIV, hepatitis and STIs for key populations.
- ▶ They include new recommendations and good practice statements.

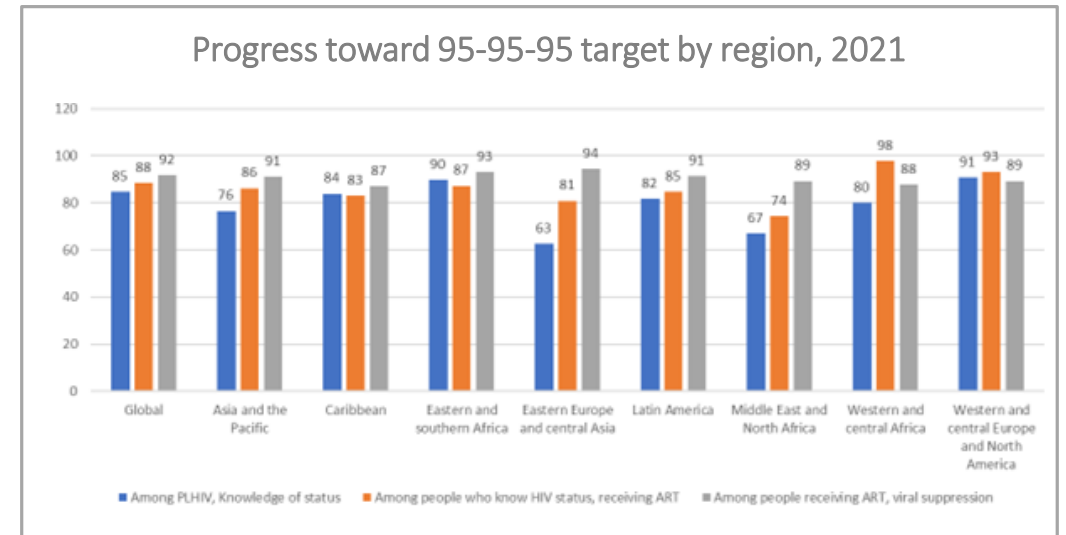


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Priority actions to end the HIV epidemic

- ▶ When scaling up HIV prevention and treatment, we also have to look at gender equity, human rights, community leadership, integration and investment.
- ▶ There have been successes, but there are serious gaps where we are missing key targets.
- ▶ No region has so far achieved the 95-95-95 targets or, indeed, the 90-90-90 targets.

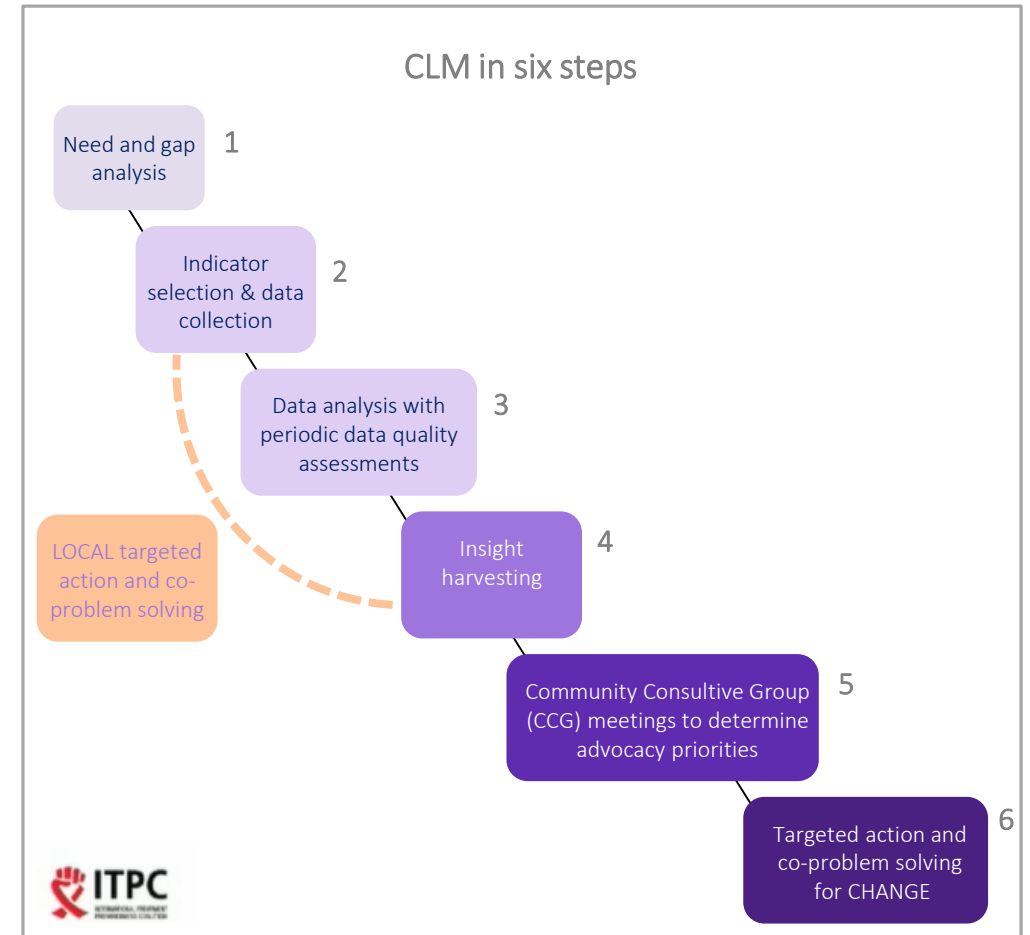


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Community-led monitoring

- ▶ Community-led monitoring (CLM) is a process where communities take the lead to routinely monitor an issue that matters to them.
- ▶ It focuses on indicators that are relevant to communities in order to improve services.
- ▶ CLM has been used to understand drug stock-outs, multi-month dispensing and the wait for viral load test results, providing vital evidence and resulting in improvements.
- ▶ It is important in understanding community experience.



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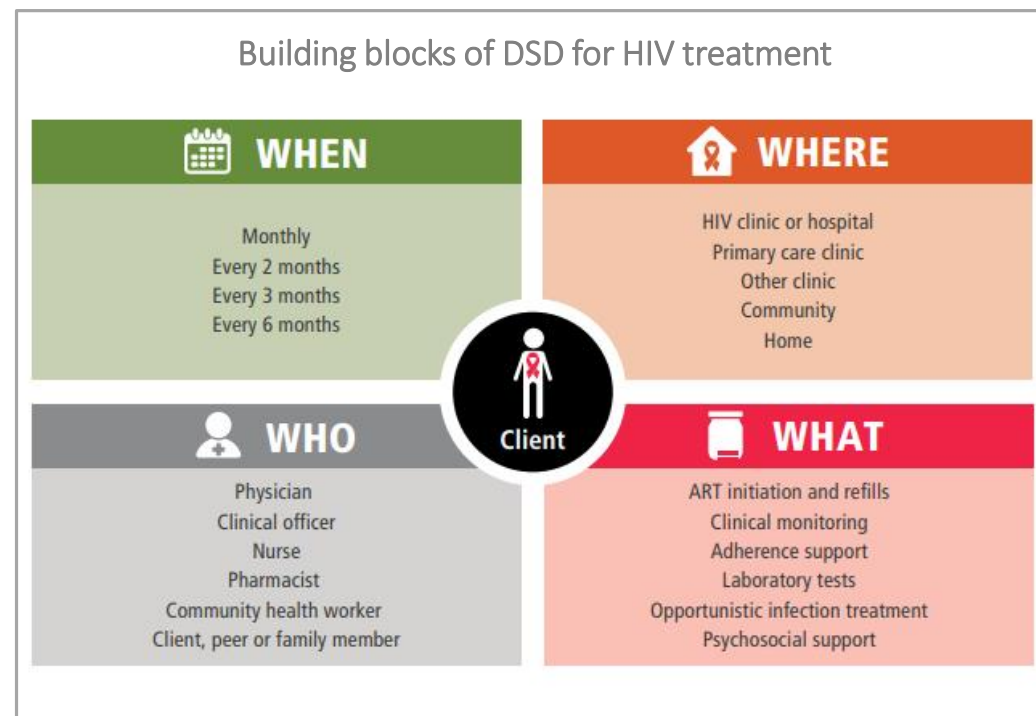
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Differentiated service delivery for HIV treatment

- ▶ WHO recommends differentiated service delivery (DSD) for HIV treatment.
- ▶ This means targeting care approaches for people with different clinical needs.
- ▶ DSD also considers the needs of specific populations, such as children and key populations.
- ▶ DSD models for HIV treatment include group models managed by healthcare workers; group models managed by clients; individual models based at facilities; and individual models not based at facilities.

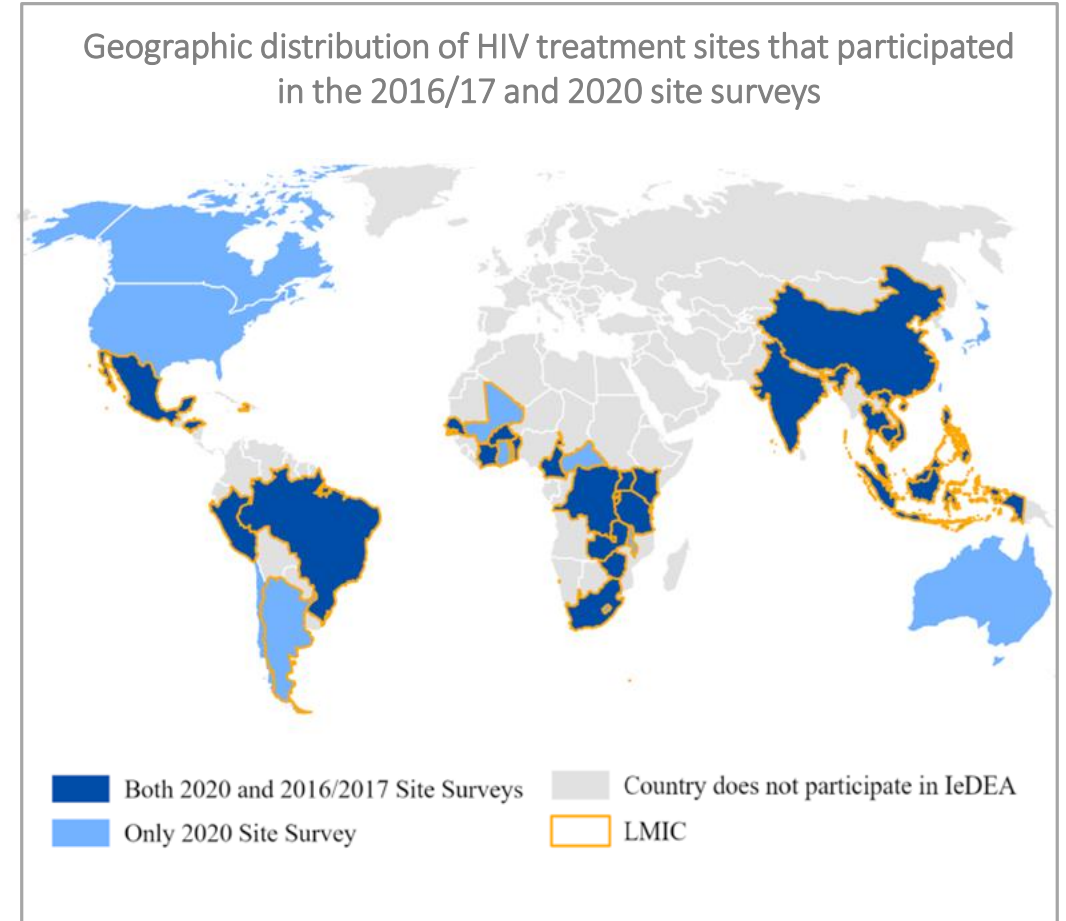


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Mental health screening and treatment

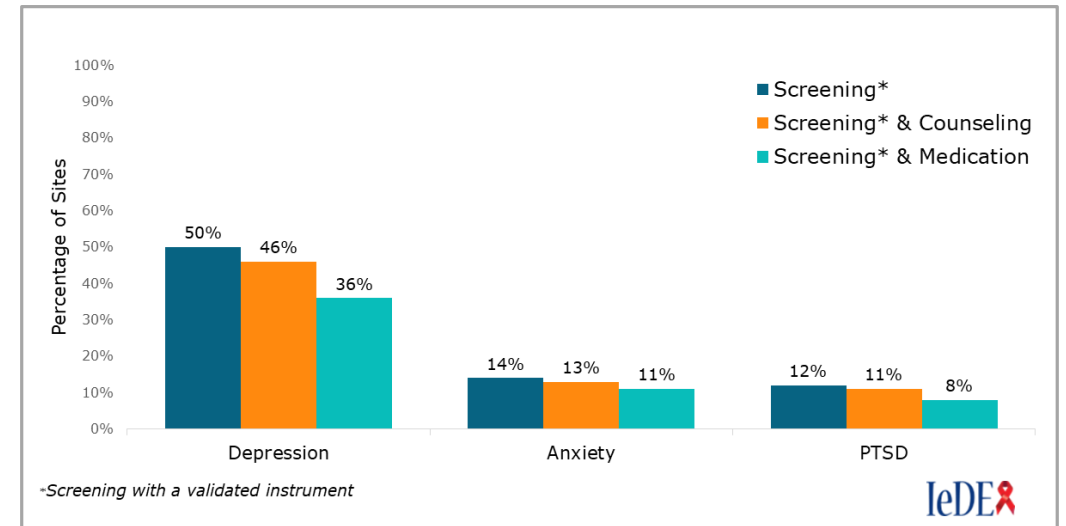
- ▶ A study examined the proportion of HIV treatment clinics screening for depression, anxiety and post-traumatic stress disorder (PTSD).
- ▶ Of 223 clinics surveyed in 41 countries, 67% were in urban settings and 78% were in low- or middle-income countries.



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- ▶ The proportion of HIV clinics screening for depression, anxiety and PTSD was 50%, 14% and 12%, respectively.
- ▶ Both screening and medication were available only at 36%, 11% and 8% of sites.
- ▶ Urban clinics and clinics in high-income countries were more likely to offer mental health services.



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Making long-acting cabotegravir PrEP affordable

- ▶ Rapid roll out of long-acting HIV prevention injections could significantly reduce new HIV cases.
- ▶ Current pricing of long-acting cabotegravir (CAB-LA) is too high. Making it affordable is likely to depend on generic manufacturers.
- ▶ The pharmaceutical company, ViiV Healthcare, has committed to supplying CAB-LA to the 14 countries that were involved in clinical trials.
- ▶ At AIDS 2022, ViiV announced a licencing agreement with the Medicines Patent Pool to allow 90 countries to access generic versions of CAB-LA.
- ▶ However, many countries are not covered by the agreement, including Russia, Brazil, Mexico and several others in central Europe, Latin America and Asia.

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