

15th International Conference on
**HIV TREATMENT AND
PREVENTION ADHERENCE**

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Universal Test-and-Connect: A new approach for a COVID/post-COVID era?

2 November 2020





2020

Where are we now?

2030 Goal: End AIDS as a Public Health Threat

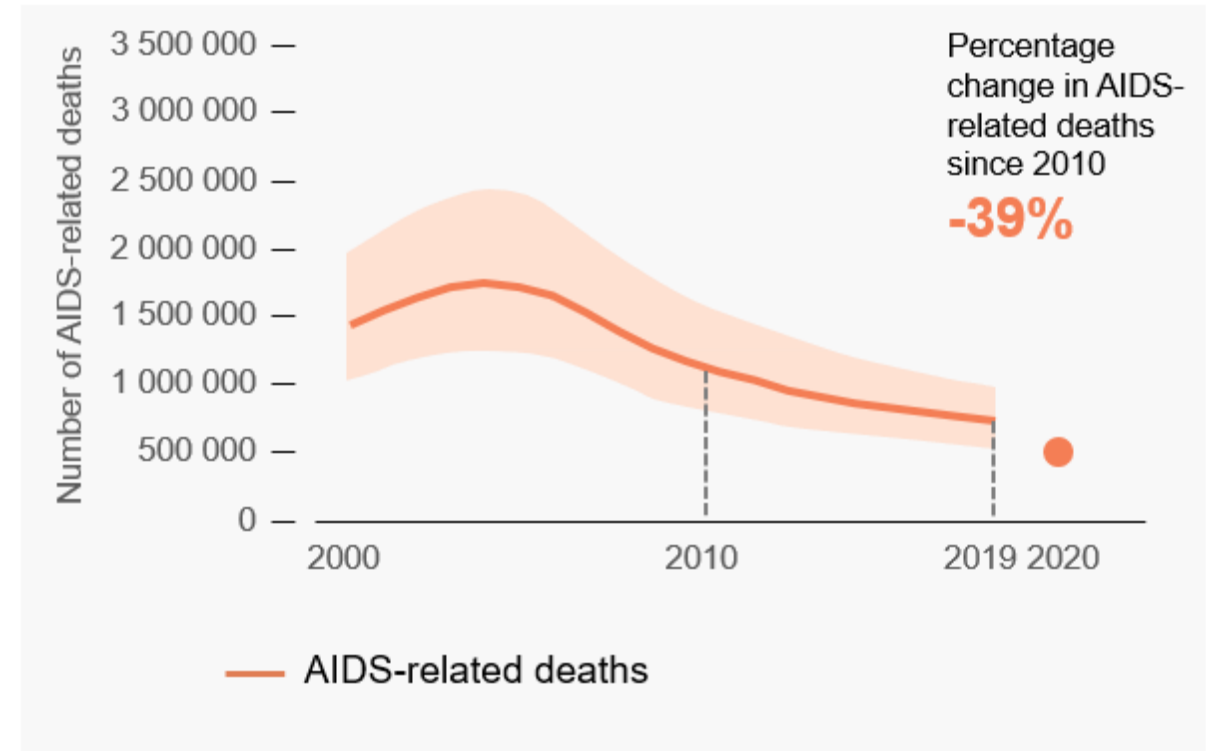
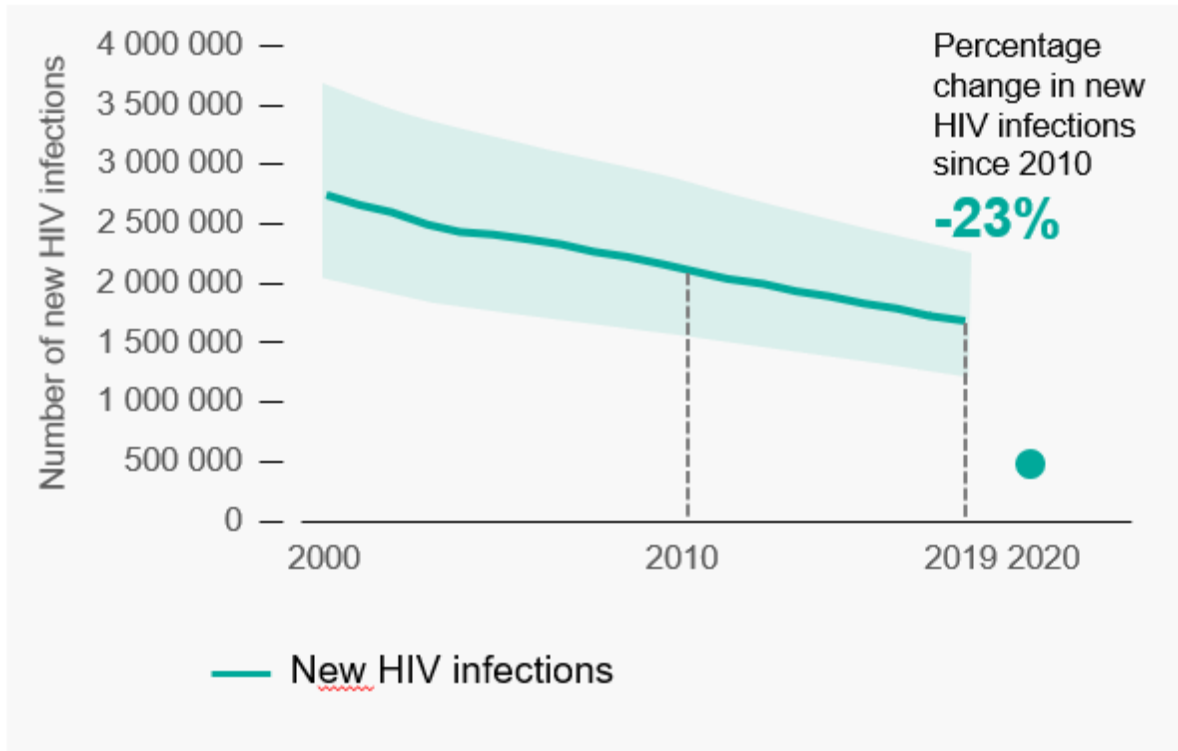
Tremendous progress on HIV, lots left to do

Universal Health Coverage high priority, lots of interest, far from achieved

*Desire to better and more meaningfully integrate services that serve clients needs
COVID-19.*

Before COVID-19, world was not on track to reach 2020 fast-track targets

Number of new HIV infections and AIDS-related deaths, global, 1990-2019



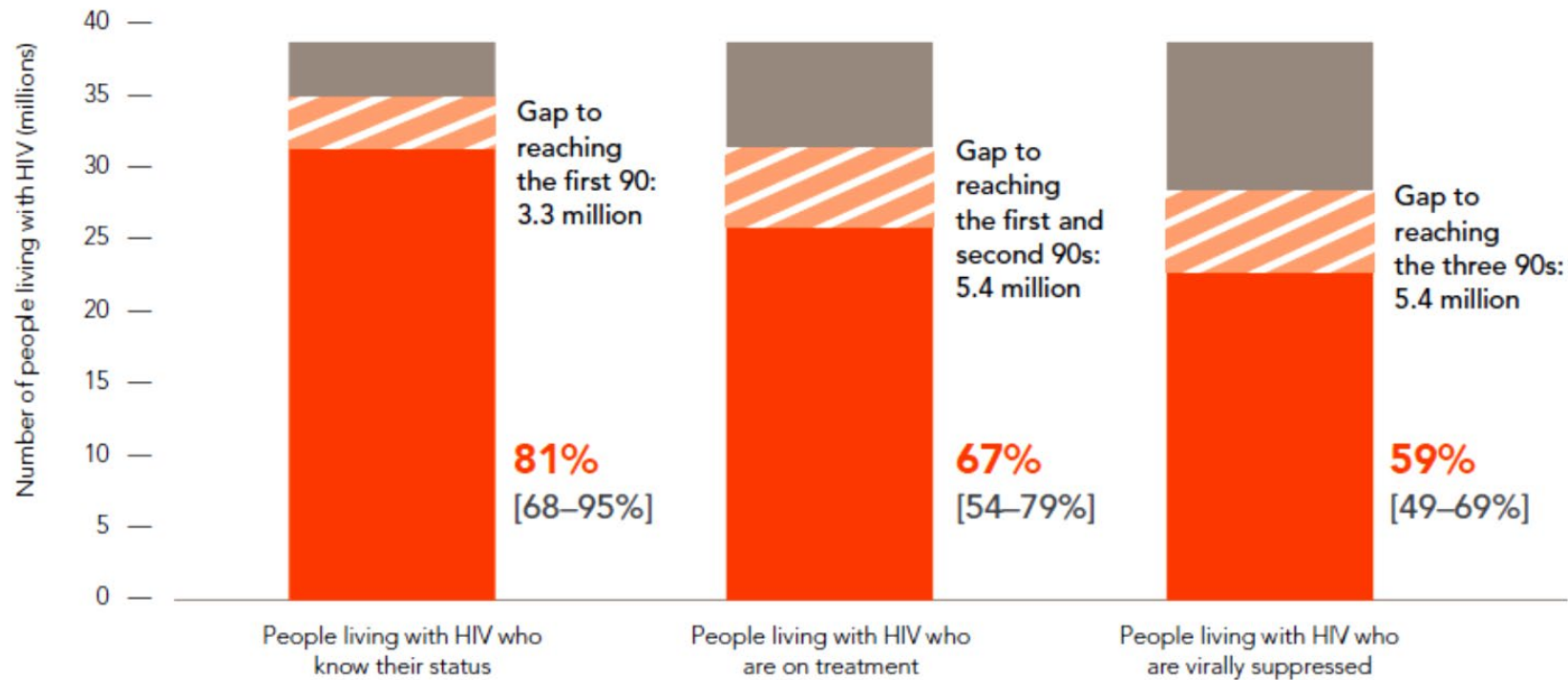
Sources: UNAIDS epidemiological estimates, 2020 (see <https://aidsinfo.unaids.org/>);
Special analysis by Avenir Health using UNAIDS epidemiological estimates, 2020 (see <https://aidsinfo.unaids.org/>).

Global Treatment Cascade Progress (90/81/73)

25.4 million on ART. 12.6 million people NOT.



HIV testing and treatment cascade, global, 2019

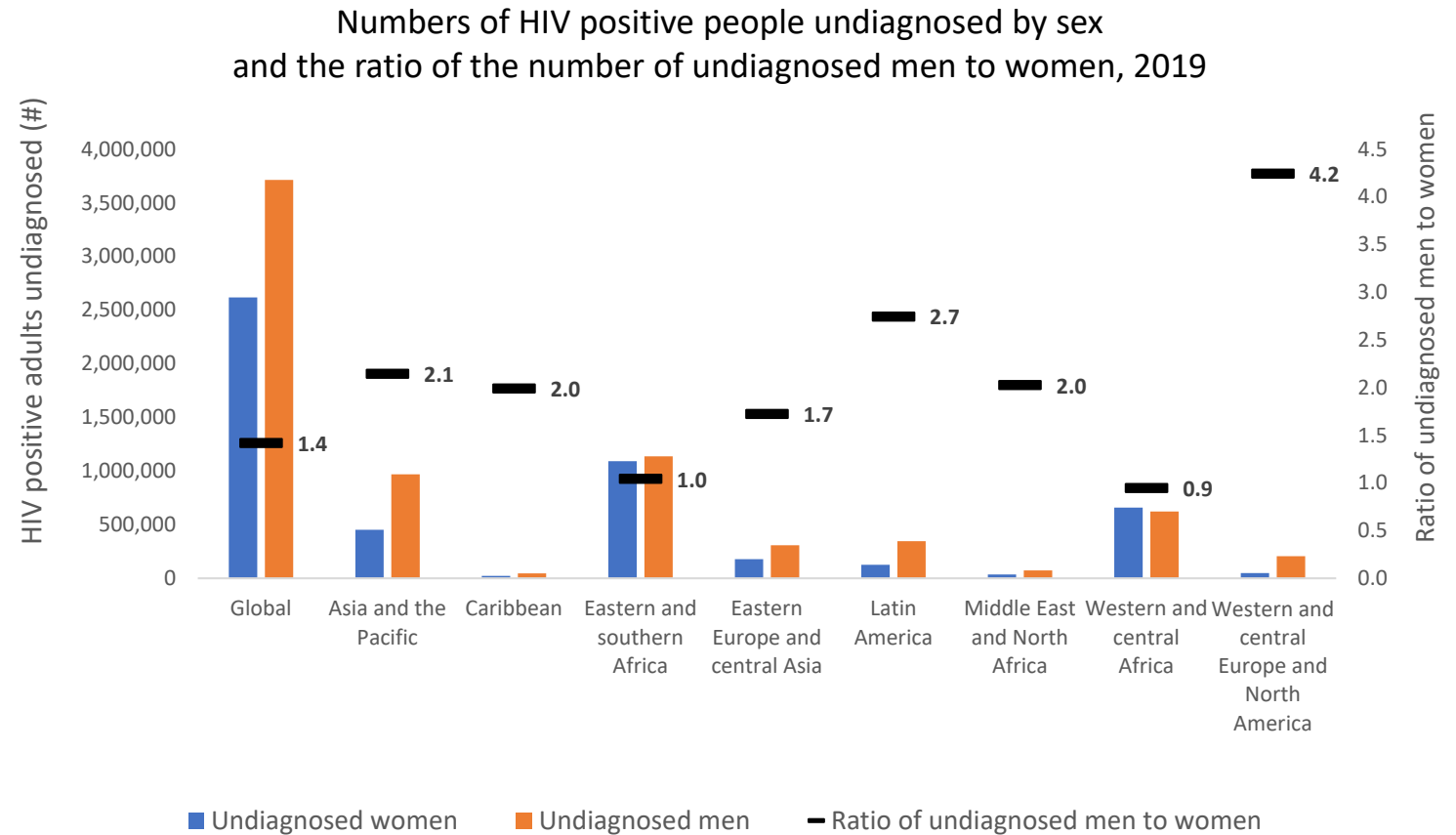


Source: UNAIDS special analysis, 2020 (see annex on methods).

Not everybody is being equally reached...

Often less reached: men, youth, key populations

Men living with HIV are less likely to know their status - this disparity persists across the HIV testing and treatment cascade

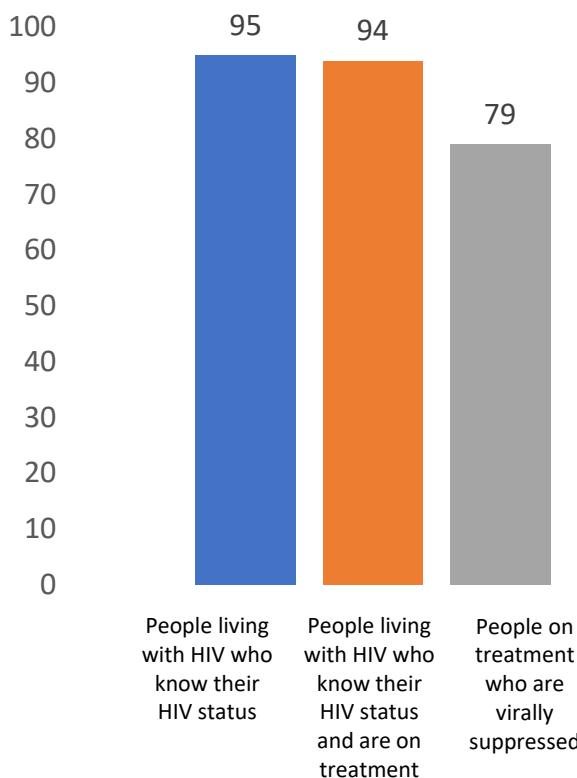


Even at “95”—not truly UNIVERSAL when specific groups are missed...

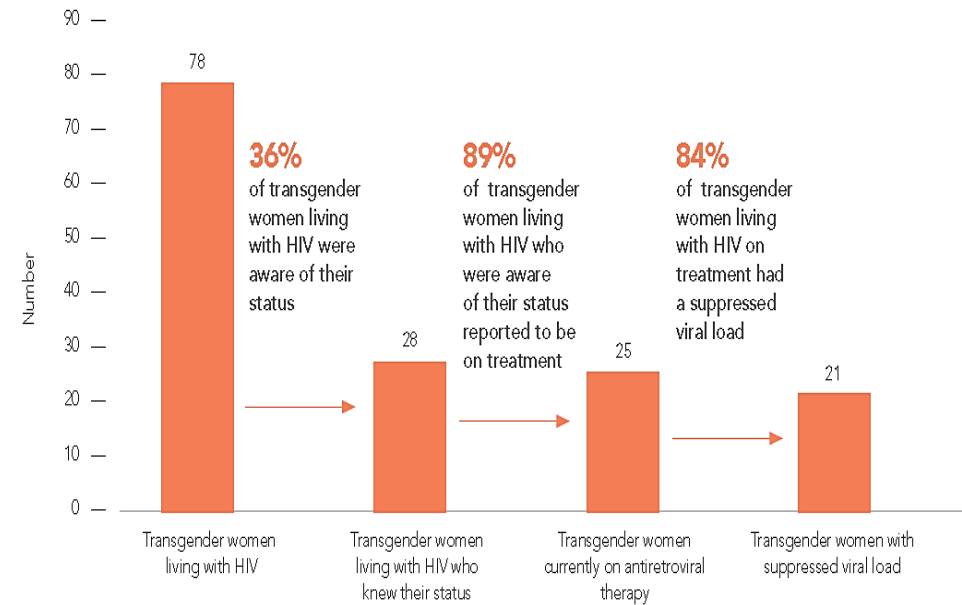
There are important inequities among all population groups

90-90-90 for all women vs transgender women

90-90-90 progress, Women 15+, Zimbabwe



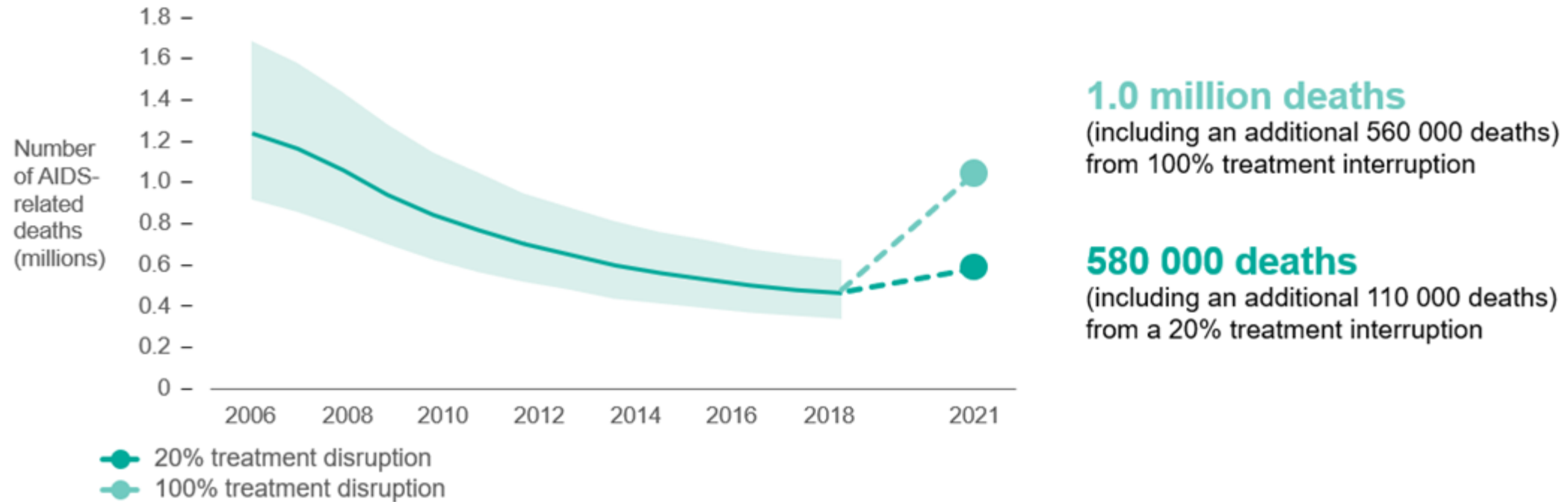
Transgender women testing and treatment cascade, Harare, Zimbabwe, 2019



Source: Harris T, Parmley L, Mapingure M, Mugurungi O, Rogers JH, Apollo T et al. HIV care cascade: men who have sex with men & transgender women/genderqueer, Zimbabwe. Conference on Retrovirology and Opportunistic Infections (CROI), Boston (MA), 8–11 March 2020. Abstract 1097.

Service disruptions associated with COVID-19 can impact global efforts to end AIDS

The impact of six months of varying levels of treatment interruption on AIDS-related deaths, sub-Saharan Africa, 2020-2021



Source: UNAIDS epidemiological estimates, 2019. Projected estimated AIDS-related deaths and child new HIV infections were derived from mathematical modelling by five research groups exploring disruptions of HIV prevention and treatment services over periods of three and six months and their effect on HIV mortality and incidence in sub-Saharan Africa.

100% disruption: Jewell B, Mudimu E, Stover J, et al. for the HIV Modelling Consortium. Potential effects of disruption to HIV programmes in sub-Saharan Africa caused by COVID-19: results from multiple models. Manuscript before publication.

20% disruption: Britta L Jewell; Department of Infectious Disease Epidemiology, Imperial College London; Edinah Mudimu, Department of Decision Sciences, University of South Africa; John Stover Avenir Health; Debra ten Brink, Burnet Institute; Andrew N Phillips, Institute for Global Health, University College London; 25 June 2020.

HIV TREATMENT SERVICES—MORE STABLE THAN PREDICTED DUE TO ACTIONS TAKEN BY PEOPLE

Country reporting. As of August 2020, 85 of 197 countries reported at least one month of treatment data between January and June 2020. 69 countries had previously published end year 2019 numbers on treatment or had data from January 2020 for comparison to subsequent months of data. 26 countries reported trend data (defined as 6 or 7 months of data).

Data inclusion criteria and methods: Data from Bhutan, Mozambique, Philippines and Seychelles were excluded due to data quality and reporting completeness reasons. Data for July for Cameroon and Zimbabwe were excluded because of low reporting coverage during the month. Lesotho noted a change in reporting forms that led to the removal of April data. For the remaining countries, a ratio was calculated of the number of people on treatment relative to January. If the number in April was the same as January, the ratio is 1. If there was a decline, the ratio is less than 1. For countries with multi-month loss to follow up definitions (e.g., 3 months), it is likely that treatment service disruptions that occurred in April may only be detected in July.

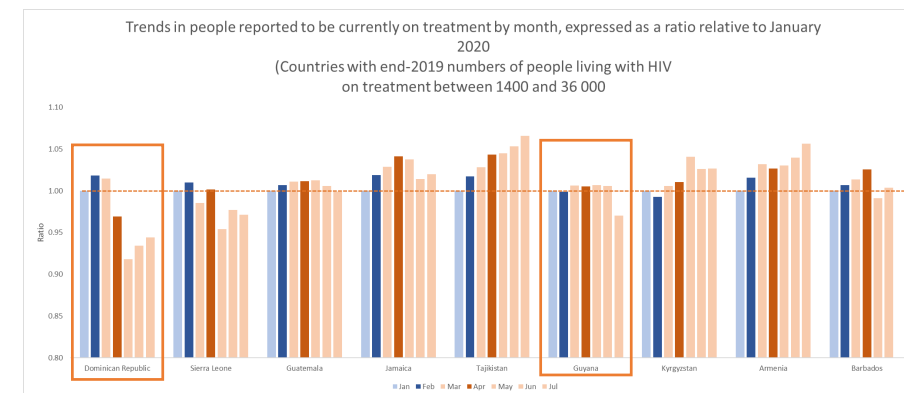
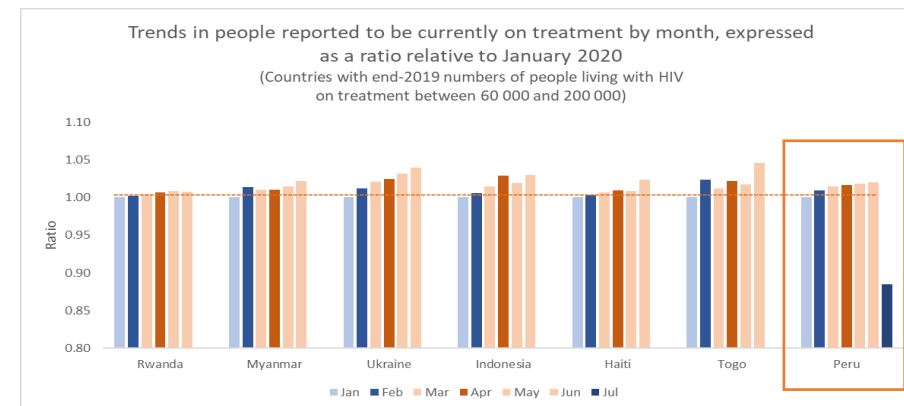
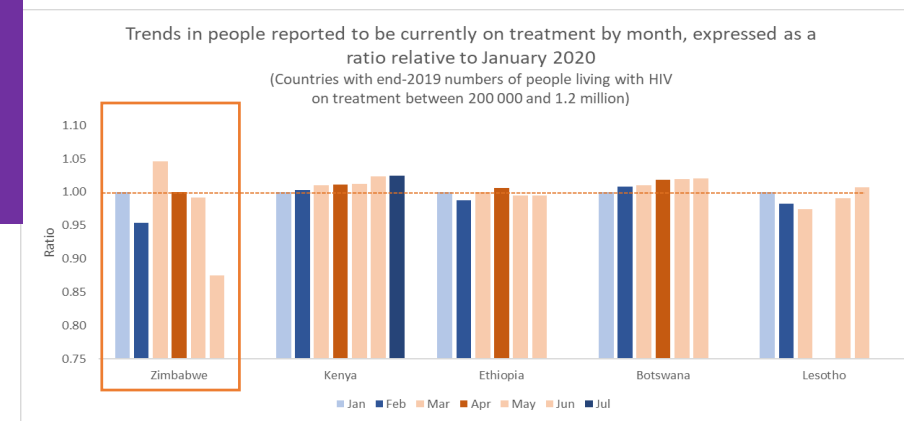
Results: Among the 22 countries with trend data, 5 countries reported monthly declines in the numbers of people on treatment after April. These included Zimbabwe in June, Peru and Guyana in July, the Dominican Republic in April, and Sierra Leone in May through July.

The remaining 18 countries did not show a decline and some countries showed a steady increase (e.g. Kenya, Ukraine, Togo, Tajikistan).

Most countries reported a 3-month lost to follow up definition in the 2020 NCPI except for Armenia and Tajikistan (1 month) or no information (Ethiopia, Haiti, Peru, Jamaica and Barbados).

Source: UNAIDS HIV services tracking tool, 2020

Notes: Monthly data are reported by country teams, with UNAIDS, Unicef, and WHO support. Historical data may be revised during each monthly submission; thus results may change.





2013—*flashback!*

Where were we, What did we learn....

Universal Test & Treat (UTT)

2013 *Flashback*



- “TREAT ALL” not yet a thing
 - September 2015 WHO Recommendation
 - 2016 UN HLM Commitments to global 90-90-90
- Increasing Evidence
 - Individual & Community Viral Load Suppression Matters
 - Feasibility Questioned
- 4 Universal Test & Treat (UTT) RCTs initiated in Africa
 - **SEARCH**: Uganda, Kenya (rural);
 - **Ya Tsie/BCPP**: Botswana (rural)
 - **PopART/HPTN 071**: Zambia, South Africa (urban, peri-urban);
 - **TasP**: South Africa (rural)
- Also, Intensive Innovative Programs (**Mbongolwane Project**, supported by MSF)

“UNIVERSAL”

- Can you do it?
 - Feasibility?
 - Will it work?
 - How fast?
- How????



UTT (randomized, controlled) Trials in Africa Showed:

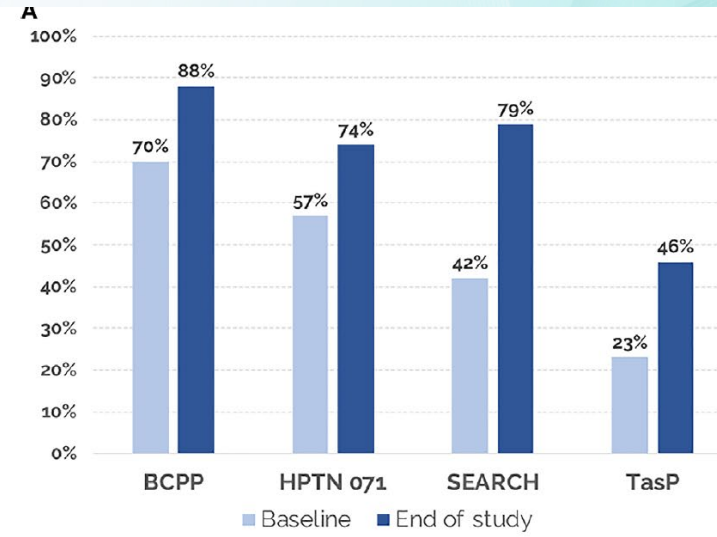
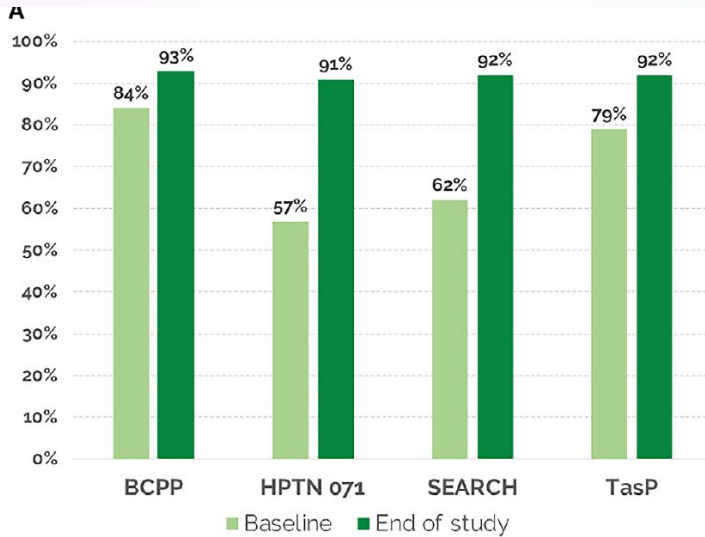


- **Decreased HIV incidence (by ~20-30%) and HIV-related mortality (by ~20%)** within **3 years** of implementing a community-wide UTC program compared with current standard care.
- **Retention in HIV treatment** (at 12 months) was **extremely high**, including for people who elected “same day initiation” of HIV treatment at their first clinic visit.
- Combination interventions can rapidly impact **population-level viral suppression**—meet and exceed the UNAIDS 90-90-90 targets (which translate to 73% of people living with HIV achieving viral suppression).
- Moreover, **they did this by reaching and connecting substantial numbers of people who were most likely to be ‘missed’**—such as the men, young people, and others who do not routinely access health facilities and those often not at home during routine community health worker visit hours.
- **+++Feasibility**

Rapid gains in population viral suppression

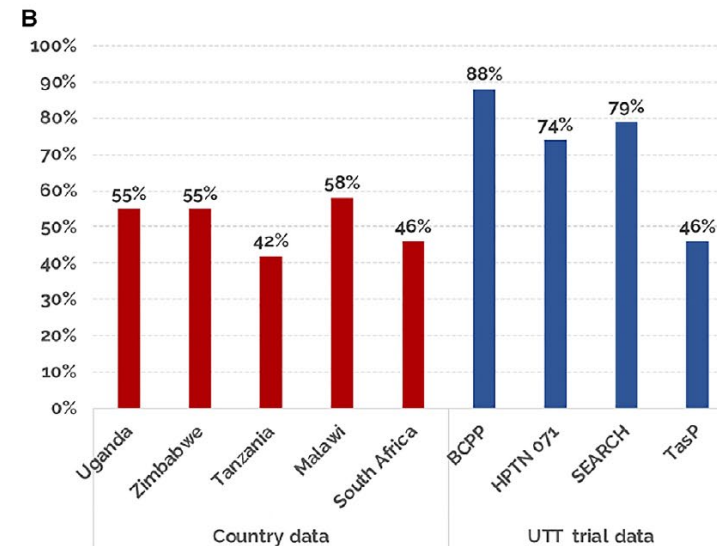
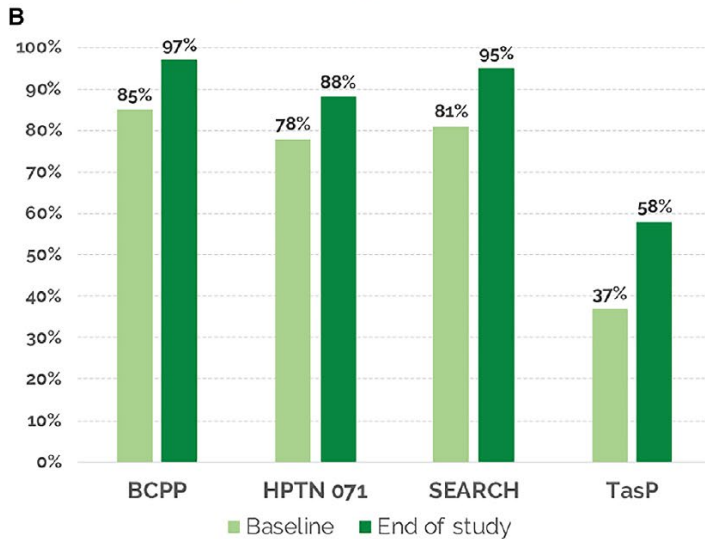


First 90



Population viral suppression: start and at 3 years

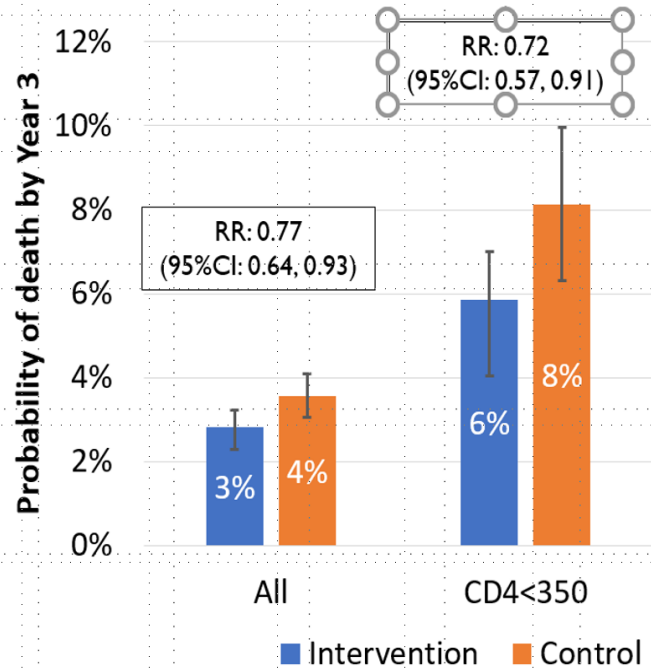
Second 90



Population viral suppression compared to other countries

UTT reduces mortality and incidence

1. Other HIV benefits



- Mortality reduced by 22%
- MTCT reduced by 50%

SEARCH, unpublished

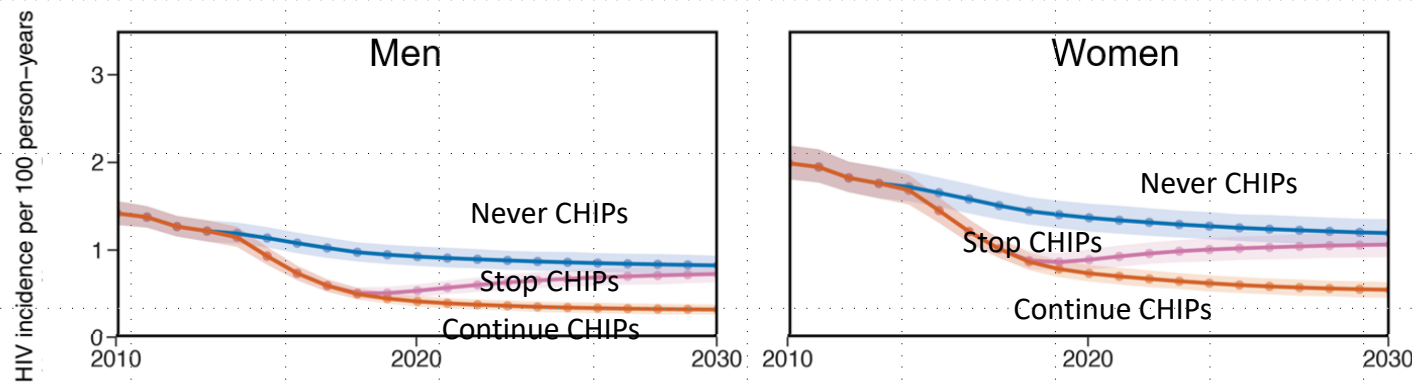
2. Partner vs. Universal testing

What if POPART had done partner testing only vs universal testing?

Index testing: ~90% fewer tests, but misses over 80% of undiagnosed persons with HIV

POPART, unpublished

3. Projected incidence reductions over time: POPART



Continued HIV incidence reduction over time; cost-effective, not cost saving

POPART, unpublished



2021

What could be: “UTT in Real-life^{**}”
(Universal Test & Connect, UTC)

**how.....*

London meeting on UTT – Dec. 2019

*Acceleration towards
ending the AIDS epidemic
as a public health threat:*

*Post-UTT game-changers
for communities to reduce
HIV mortality & incidence*

UTT trial teams:



TasP
ANRS 12249



Key “thought trust” partners:

Civil Society & Community-led Representatives,
Government Officials, Modelers, Health Economists, HIV
Prevention Experts

Technical and Funding Partners:



1. What IS Universal and Connect (UTC)?



“Universal Test & Connect” (UTC) is an ***intensive community-wide strategy to accelerate HIV epidemic transition to rapidly reduce new HIV infections and deaths from AIDS*** across a specific community.

It is meant as an additional, complementary strategy directed ***toward specific communities or sub-national areas for rapid impact.***

It relies on a variety of ***community-based people-centred approaches*** to reach people outside of health care facilities, ***CONNECTS*** them to ***quality, respectful and non-stigmatizing HIV services***, and ***transforms community acceptance and engagement*** for HIV and health. ***

2. What's new or different about UTC?



- *Different from business as usual:*
 - UTC takes “universal” from theory to practice...
 - **Figures out precisely who in a community has not been reached yet and uses community wisdom, data, and flexible and iterative service approaches to reach them.**
- Although UTC *relies on the **combination of many existing approaches***, it is NOT just a NEW NAME for existing approaches like “Treat All” or previous “mass” testing campaigns...
 - Yes, may include door-to-door or multi-disease fairs...
 - BUT:
 - Specifically reaches those who’ve been persistently missed
 - Avoids “overreach” to people most available and convenient, and instead finds those who have been persistently missed.
 - Fundamental focus on linkage to and retention in quality care for those that test positive
 - Connects to a continuum of care for important HIV prevention services for those who test negative but are at high risk
- Requires an **initial “activation” and enumeration of households.**

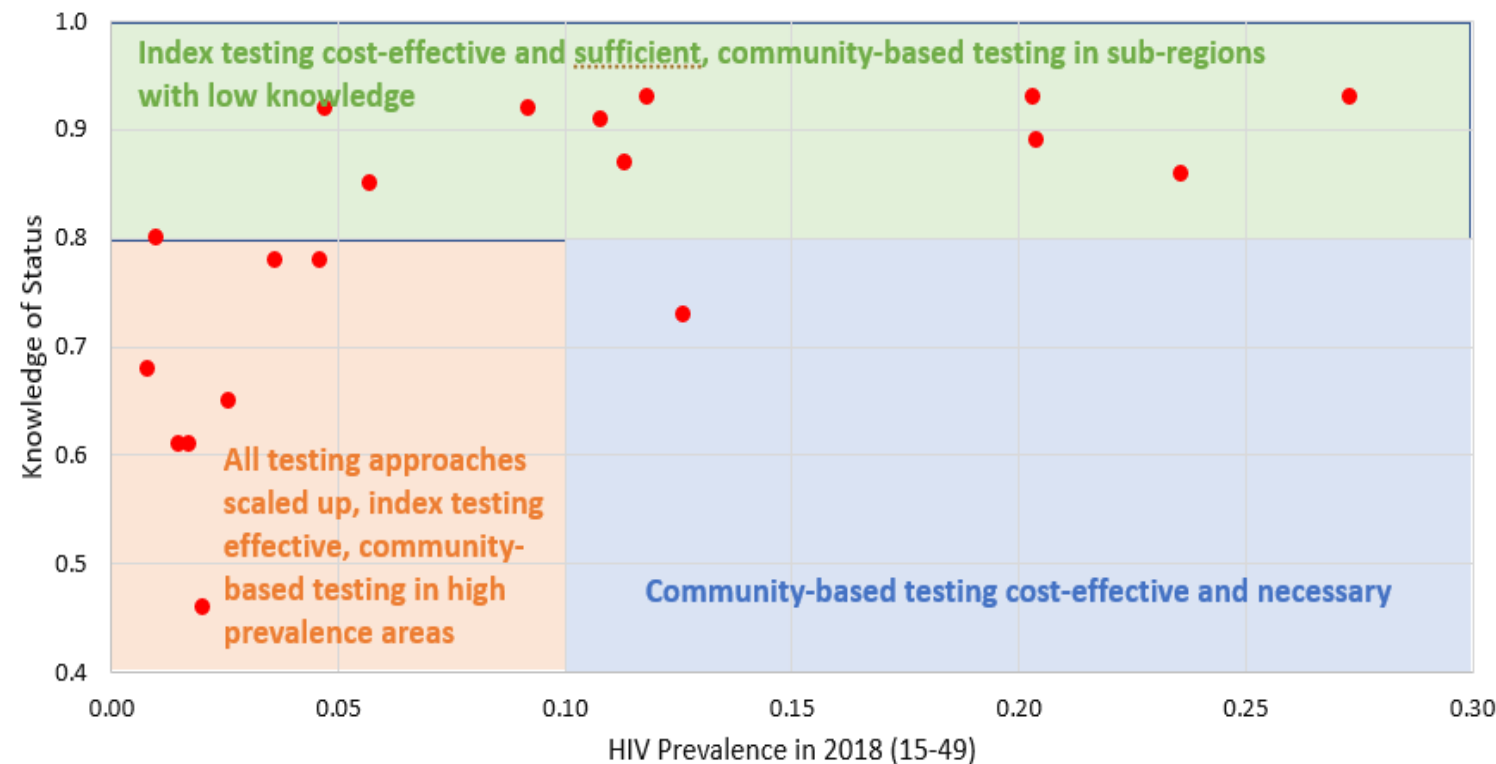
“Activation” & Iteration: Knowing & Reaching those missing

- **Activation of households** provides information & choices:
 - “**Enumeration**” is part of this--a census of the community, in order to ensure that testing services can reach every individual and to enable ongoing monitoring to identify missing or inadequately served sub-populations
 - Keeps people safe – ensures universality, works through peer respondents and the community.
 - Increases HIV and health literacy up front—**gets people and households interested in new prevention services**, shares new treatment insights such as U=U (Undetectable = Untransmittable), and proves other services such as hypertension screening and contraception services. (COVID?)
- **Iteration: *dynamic, holistic and responsive* during implementation.**
 - Initial “round of services”; subsequent services designed and delivered in response to who is left to reach or who would benefit from repeated or more intensive services. Community leaders are critical to helping understand and mobilize to reach the missing people and populations.
 - May include various multi-disease strategies (hypertension, diabetes screening, sexual and reproductive health, maternal and child health services, etc.), visiting specific households on evenings or weekends, youth-friendly discussions of relationships and sex.
- Synergizes with “in-facility approaches” by reaching persons who shun or avoid these



3. WHERE? Communities to Consider...

- UTC should *not* be applied everywhere –resource-intensive, not for low HIV prevalence and incidence settings.
- Considerations for “where”: knowledge of HIV status, community levels of unsuppressed viral load, and where population level viral suppression is low and mortality remains high



OTHER POSSIBILITIES:

- ? “high incidence neighborhoods + networks” in otherwise low prevalence urban areas?
- ? “universal for....” targeting youth or men?

Source: Avenir Health 2019. Red dots represent knowledge of HIV status and HIV prevalence, 19 countries in sSA:

4. UTC Policy & Practice “Essentials”



- **TESTING:**

- Lay provider HIV testing, age of consent for HIV testing <15 years, HIV self-testing, quality and client-supportive index and social network testing, with consent and without coercion.

- **RAPID ART START & OPTIMIZED SERVICES:**

- Same-day HIV treatment initiation, differentiated (multi-month dispensing) and patient centered service delivery, accessible viral load testing, regimen optimization/dolutegravir transition, removal of user fees for HIV services.

- **LINKAGE TO PREVENTION FOR HIV AT RISK***:**

- Availability and access points for combination HIV prevention services including information/comprehensive sexual education, male and female condoms, reproductive health services including contraceptives, STI screening and management, VMMC, and PrEP.

- **REAL-TIME DATA, TARGETED RESPONSE**

- Effective collection of process data to provide real-time information on coverage and gaps to support timely course correction and problem solving.

5. COVID-19 contexts provide new options and demands



- Community Trust & Acceptability & Engagement
 - Test & Trace, Vaccine preparedness & delivery
 - Co-morbidities: HTN, DM, Lung Disease
 - Future Antibody surveys, etc
- Activation & Enumeration
- Priority under-reached settings align
 - Informal settlements, high density suburbs, slums
 - Those also w high HIV rates
- Strong community-facility linkages

6. Strong management. Shared accountability



- Governance: Intensive, responsive management and communications...
 - Community & Health Services Leadership Aligned
 - Community Services & Facility Services Linked
 - Dynamic, Regular Sharing of Data
 - Joint Problem-identification & Problem-solving

Now what?



- How can countries take elements of the UTC package forward?
- How do we create demand and resources for UTC?
- What if we did this in one city among one population?

Who's Willing to Try?



2021: A Special Year

- UNAIDS:
 - 2021-2025 Target Setting will maintain urgency
 - Post-2021 Global AIDS Strategy
- COVID-19, HIV, Pandemic Preparedness, UHC
 - COVID-19...far from over
 - Need for Rapid Recovery from COVID-19 stalls or interruptions
 - More clear than ever—failure to invest in Health risks Economies
- New thinking, different investments, pulling communities together

THANK YOU!



What material/literature resources are available?

Please see below to links to a summary and individual publications from the UTT trials:

1. JIAS Commentary by UT₃ Consortium: "What do the Universal Test and Treat trials tell us about the path to HIV epidemic control?": <https://doi.org/10.1002/jia2.25455>
2. The HIV Prevention Trials Network (HPTN) 071 (PopART):
<https://www.nejm.org/doi/full/10.1056/NEJMoA1814556>
3. Sustainable East Africa Research in Community Health (SEARCH):
<https://www.nejm.org/doi/full/10.1056/nejmoa1809866>