

# USAID HIV SUPPLY CHAIN INVESTMENT

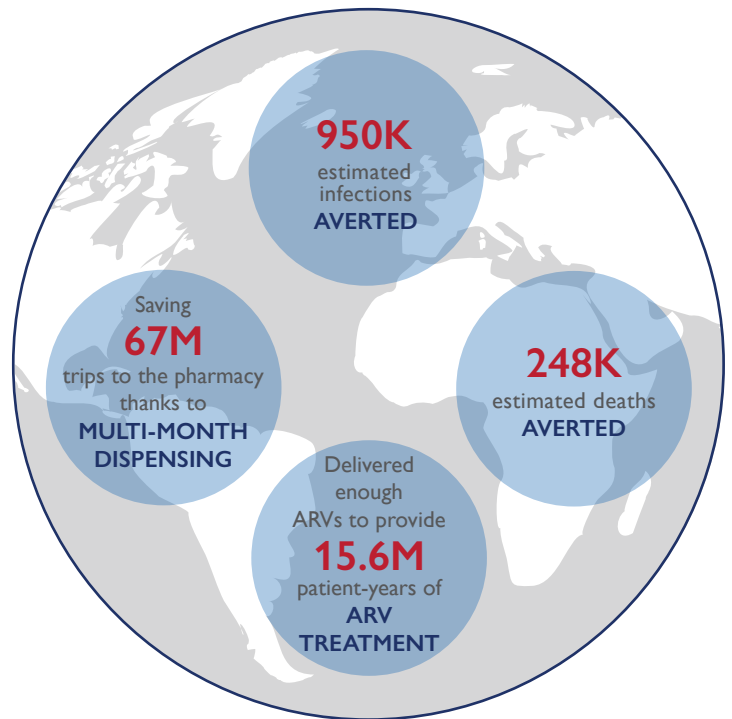
What began as an unknown illness arising from a viral infection that attacked the immune system eventually came to the forefront in 1981 when the first five cases were reported by the U.S. Centers for Disease Control and Prevention. Today, approximately 38 million people globally are living with the human immunodeficiency virus or HIV.

The global health community has come a long way in testing, treatment, care and prevention since HIV was first identified. More people have access to lifesaving antiretroviral (ARV) treatments than ever before, allowing people living with HIV to live long and healthy lives. Thanks to the President's Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Agency of International Development (USAID), lifesaving HIV/AIDS commodities reach millions of people globally who need them most using the Global Health Supply Chain Program-Procurement and Supply Management project's procurement mechanism.

By working closely with governments and clinical partners, the project delivered over **15 million person-years of ARV treatment**, including 10.7 million person-years of the optimal ARV tenofovir/lamivudine/dolutegravir (TLD) to 56 countries since 2016. GHSC-PSM's efforts, including furthering client-centered services, using resilient and adaptive approaches and supporting sustainable supply chain solutions, have helped drive USAID towards meeting the UNAIDS 2030 targets – 95 percent of all people living with HIV tested by 2030, 95 percent on treatment and 95 percent virally suppressed.

## KEY DATA POINTS

The impact of the global HIV/AIDS country-led, patient centric and data driven GHSC-PSM supply chain has resulted in:



Investments in optimal ARVs and HIV prevention commodities, such as condoms, not only save lives but can also save patients time and money. Overall, GHSC-PSM achieved more than **\$200 million in savings** that can potentially be allocated elsewhere in healthcare systems.

## METHODOLOGY

Both the estimates of **deaths averted and infections averted** were calculated using the [Goals Model](#), a dynamic, compartmental HIV epidemic model developed by [Avenir Health](#) and bundled within the Spectrum suite of policy models.<sup>1</sup> The Goals Model incorporates demographic, epidemiological and pharmacological country-level data, measuring HIV infections and outbreak within a target population based on measured behaviors, such as injected drug use, sex work and men having sex with men. Spectrum is the software used to actualize the Goals Model, providing results based on the identified populations, behavior and timeframe. A range of different calculations and assumptions assess condom use, including initial use (usually around zero) to percentage use today, with growth rate and timeframe stemming from these numbers.

This allows for a holistic assessment of these populations within countries by grouping results based on multiple circumstances in which infections are likely averted through condom use.

For **patient-years of ARV treatment**<sup>2</sup> the indicator is calculated by summing the total number of bottles of triple fixed-dose combination adult ARVs delivered, converting them to monthly treatment units and dividing by 12 to yield patient-years of treatment. Doses for calculating treatments are based on [World Health Organization](#)-recommended guidelines.

For the number of **patient pharmacy trips likely saved**, we assume that a 90-tablet bottle (3-month supply) of TLD will save two health facility trips and a 180-tablet bottle (6-month supply) will save five. To calculate the indicator, we multiply the total number of bottles of each product delivered by the number of trips saved per bottle and then sum the results together for the two products.



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HIV LIFESAVING COMMODITIES	TOTAL PRODUCTS DELIVERED LIFE OF PROJECT – SEPTEMBER 30, 2021
Antiretrovirals (ARVs)	<b>118.7 Million bottles of adult triple-fixed dose ARVs</b>
Tenofovir/lamivudine/dolutegravir (TLD)	<b>61.1 Million bottles</b>
Condoms	<b>2.69 Billion</b>

<sup>1</sup>In this model, we based estimates of deaths and infections averted on the number of ARVs and condoms delivered – we do not make assumptions about product loss or patient adherence. Using these quantities of “product delivered,” the indicators are calculated by comparing the estimated number of deaths and infections with and without GHSC-PSM project intervention. The impact of our work, measured in lives saved and infections averted, is the difference. The baseline Goals files used in this work were calibrated to align with the most recent UNAIDS estimates.

<sup>2</sup>Current ARV products include dolutegravir/lamivudine/tenofovir (TLD) in 30-, 90- and 180-tablet bottles. Life of project figures (i.e., since 2016) include efavirenz/lamivudine/tenofovir (TLE) and nevirapine/lamivudine/zidovudine (NLZ), which were procured and delivered prior to the transition to TLD. Additionally, this does not include pediatric treatments.