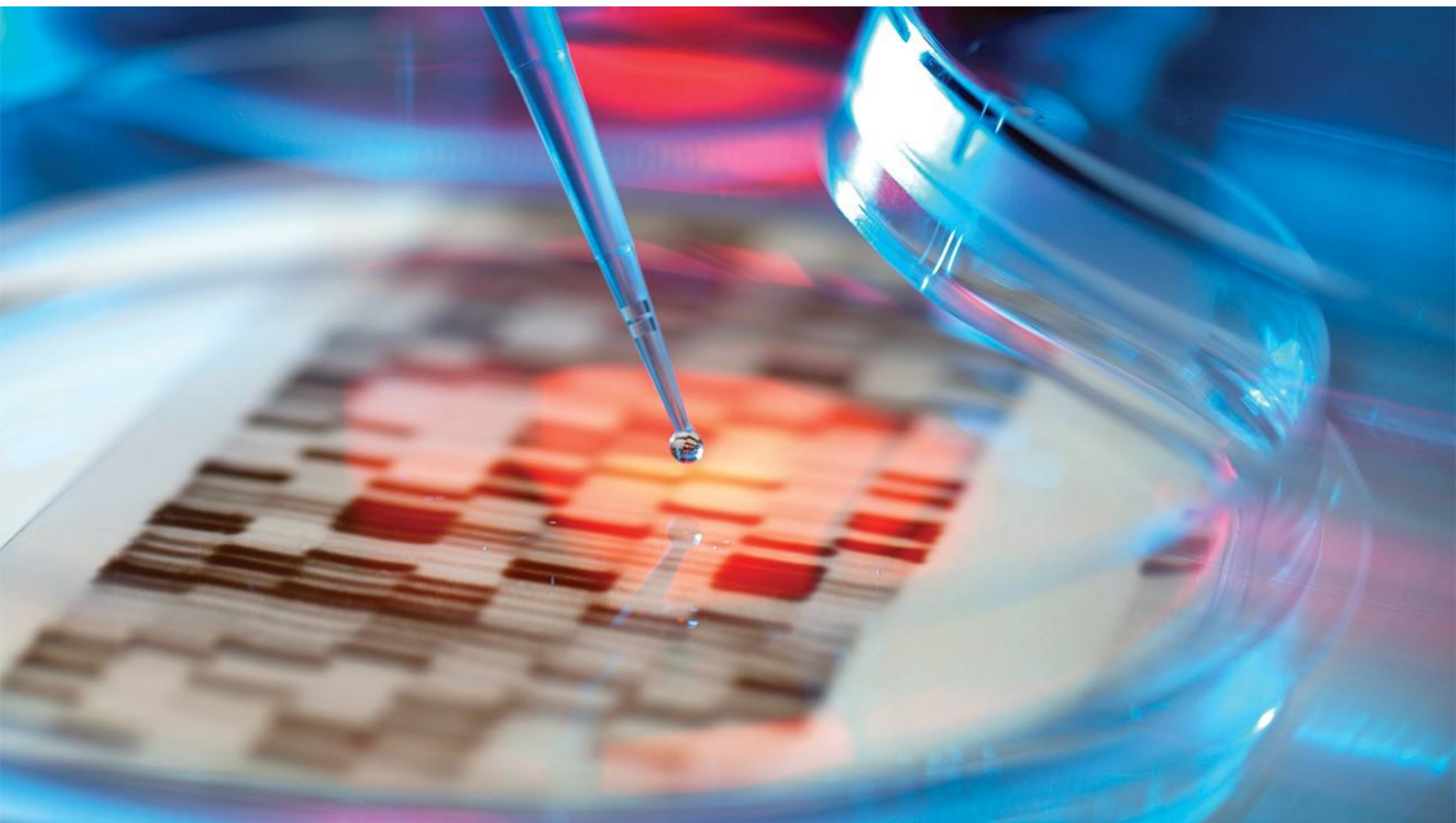




Ending the HIV epidemic: Ensuring equitable access to innovative HIV treatment and care

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Executive summary

Despite decades of progress, HIV remains an urgent global health crisis. As of 2024, 40.8 million people were living with HIV globally, and nearly one in four still lacked access to life-saving treatment.¹ Indeed, the epidemic is far from over, and even in high-income countries, persistent systemic disparities in prevention, testing, and care continue to undermine efforts to achieve the United Nations' 95-95-95 targets (ensuring that 95% of people with HIV know their status, 95% of those diagnosed receive treatment, and 95% of those on treatment achieve viral suppression) by 2025 and to end the AIDS epidemic as a public health threat by 2030.²

The UNAIDS Global AIDS Strategy 2021–2026 identifies inequality as the central barrier to progress, defining it as an imbalance or lack of equity in HIV vulnerability, access to services, and health outcomes across populations and settings. The strategy includes ambitious prevention targets: 95% of people at risk of HIV infection use appropriate combination prevention, and at least 50% of people at substantial risk of HIV infection should be using pre-exposure prophylaxis (PrEP) by 2025. Few countries met these targets and in most there is a considerable gap. The Global AIDS Strategy 2026–2031 calls for bold action to close these gaps across the full care continuum, sharpening the 2030 focus on treatment, prevention, and discrimination-free access, with targets to reach 40 million people with treatment and viral suppression and 20 million people with antiretroviral-based prevention options. With the 2030 goal of ending AIDS as a public health threat fast approaching, the window for decisive action is rapidly closing. For high-income countries to meet these targets, there is a consensus they must confront the structural barriers and entrenched disparities that continue to leave key populations behind.

The objective of this paper is to assess the extent of inequities along the HIV care continuum – including prevention, testing and diagnosis, treatment access, and adherence and retention in care – and their associated root causes to identify policy solutions that would reduce inequity and accelerate progress toward ending AIDS as a public health threat. To achieve this, we conducted a literature review across eight high-income countries – Australia, Canada, France, Germany, Italy, Japan, Spain, and the United Kingdom. We examined evidence of inequities across each stage of the HIV care continuum focusing on key populations affected by HIV. These include:

- Gender and sexual orientation: Gay and bisexual men (GBM), heterosexual men and women, and transgender people.
- Race, ethnicity, and nationality: Migrants, indigenous people, and racial and ethnic minorities.
- Economically vulnerable groups: Low-income and homeless populations.
- Others: People who inject drugs (PWID), sex workers, and incarcerated people.

¹ UNAIDS. (2025). Global HIV & AIDS statistics — Fact sheet. <https://www.unaids.org/en/resources/fact-sheet>

² Hader, S., Shibemba, M., Tanuma, J., Lubkeman, M., López, M., Yáñez, C., & Ragull, L. (2024, June). Going the extra mile to end the HIV epidemic: Learning from selected high-income countries' efforts to reach 2030 UNAIDS HIV goals. Boston Consulting Group.

The report is structured in three parts. First, we present the available evidence on the extent of inequities and examine their root causes at the individual, social, and structural levels. Second, we review policy progress and emerging best practices across the countries studied. Finally, we outline actionable policy recommendations to advance equity and improve HIV outcomes across high-income country settings.

Extent of inequities and root causes

Ending AIDS as a public health threat will require addressing persistent inequities that disproportionately affect key populations. Certain high-prevalence groups (GBM, sex workers, transgender people, PWID, and incarcerated people) and their partners comprise 5% of the global population, but 70% of HIV cases.³ Important inequities also exist across other populations, including migrants, Indigenous peoples, and racial and ethnic minorities. The extent of inequities can be observed in a range of different metrics: migrants now account for nearly half of new cases in the EU/EEA; in Canada, diagnoses rose by 15%, with PWID facing rates nearly 100 times higher than the general population; and Japan reports HIV rates among migrants over eight times higher than among nationals.⁴ These disparities are compounded by the unique nature of HIV as a chronic condition: unlike other lifelong illnesses, sustained treatment adherence is not only an individual health imperative but a public health one, as viral suppression prevents onward transmission and protects the wider community.⁵ Metrics along the care continuum differ markedly by gender, origin, income, age, and race or ethnicity, making it essential to examine the epidemic through multiple lenses beyond behavioural exposure in order to identify and address the persistent barriers to ending it.

A significant barrier to making progress has been the availability of published data and the inconsistency and incompleteness of disaggregated data. While more countries now publish indicators by age, gender, and certain population groups, reporting is often fragmented, particularly for groups like PWID, transgender people, sex workers, and migrants, limiting the ability to track progress and compare across countries. Though progress has been made, many high-income countries across North America, Europe, and Asia-Pacific have limitations with the breadth and depth of reporting. Efforts such as the European Centres for Disease Prevention and Control (ECDC) annual surveillance and UNAIDS' inequalities platform are steps in this direction, but increased focus on key groups and care measures are still needed.

Our goal is to articulate where inequities have been identified and substantiated by available evidence. We first considered the extent to which data exist to examine disparities and the reported magnitude of inequities across the care continuum. We then reviewed the root causes that drive them.

In terms of disparities along the care continuum:

- **Prevention:** Despite overall declines in HIV incidence among some groups, significant disparities persist, with rising cases among migrants and PWID in some countries driven by cultural and language barriers, stigma, low self-perceived risk, and insufficient targeted

³ Joint United Nations Programme on HIV/AIDS. (2022). *Dangerous inequalities: World AIDS Day report 2022*. Geneva: UNAIDS.

⁴ European Centre for Disease Prevention and Control. (2025). *HIV and migrants in the EU/EEA: Monitoring implementation of the Dublin Declaration on Partnership to Fight HIV/AIDS in Europe and Central Asia – 2025 progress report*; Government of Canada. (2024). *Canada's progress towards ending the HIV epidemic, 2022*. <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/canada-progress-towards-ending-hiv-epidemic-2022.html>; Miller, R., Li, C., Olete, R. A., & Jimba, M. (2024). Disparities in HIV incidence and mortality rates between Japanese nationals and international migrants before and during the COVID-19 pandemic: evidence from Japan's national HIV surveillance data (2018–2021). *AIDS care*, 36(11), 1617-1625.

⁵ Eisinger, R. W., Dieffenbach, C. W., & Fauci, A. S. (2019). HIV viral load and transmissibility of HIV infection: undetectable equals untransmittable. *Jama*, 321(5), 451-452.

prevention outreach. Pre-exposure prophylaxis (PrEP) has proven to be a transformative tool for HIV prevention. Despite substantial growth, with 344,596 people receiving PrEP across the EU/EEA in 2024, uptake remained below the 2025 target of 500,000 and unevenly distributed. PrEP uptake is heavily concentrated among urban, socioeconomically advantaged GBM; other key populations, especially women and migrants, remain underrepresented. Inequities in incidence and PrEP uptake are linked to low awareness, stigma, restrictive eligibility criteria, limited provider outreach, and cost-sharing mechanisms that deter access for populations experiencing high unmet need.

- **Testing and diagnosis:** Undiagnosed and late diagnosed HIV continue to present a major challenge across key populations. Common drivers of diagnosis disparities have been low self-perceived risk, language and cultural barriers, stigma, and inconsistent provider outreach. Regional disparities and fragmented systems further hinder early detection, underscoring the need for inclusive, culturally tailored testing strategies.
- **Treatment:** Disparities in treatment initiation and prescribing practices are evident across multiple countries, particularly affecting migrants, women, indigenous populations, and other key groups. These populations are likely to face delay in starting antiretroviral therapy (ART) and more likely to be prescribed older or less preferred regimens. These trends reflect both individual-level challenges, such as unstable housing or lack of insurance, and systemic barriers including outdated treatment guidelines, fragmented care systems, and restrictive prescribing or reimbursement policies.
- **Adherence and retention:** While ART availability has expanded, not all individuals are equally able to stay engaged in care and achieve sustained viral suppression. Adherence and retention remain especially difficult for migrants, women, PWID, racial and ethnic minorities, and those experiencing economic insecurity. These inequities are shaped by overlapping barriers, including housing instability, limited support networks, and financial strain.

Policy progress and best practices

There has been notable policy progress since the launch of the “UNAIDS Global AIDS Strategy 2021–2026: End Inequalities, End AIDS,” with an increasing number of countries incorporating a focus on addressing inequities into their national HIV plans. However, the degree to which health inequities in HIV have been identified and the extent of policy focus remain inconsistent across countries and populations. Countries also differ in the structure and ambition of their HIV strategies. Some, like France, Germany, Spain, and Australia, have adopted national plans aligned with UNAIDS targets; others, such as Canada and the UK, operate under regional or non-binding frameworks. Japan's national response is guided by periodic, non-binding MHLW guidelines; Italy's 2017–2019 plan was never funded or updated, though a new plan with dedicated funding is pending approval. Across these strategies, GBM remain the most consistently prioritised group, with more limited and inconsistent attention to other key populations such as migrants, PWID, sex workers, Indigenous communities, and transgender people. The degree to which plans focused on inequities appears highly correlated with the evidence available on the scale of the issue for different key populations, highlighting the need for strengthening data collection and monitoring as a foundation for more targeted and effective HIV responses.

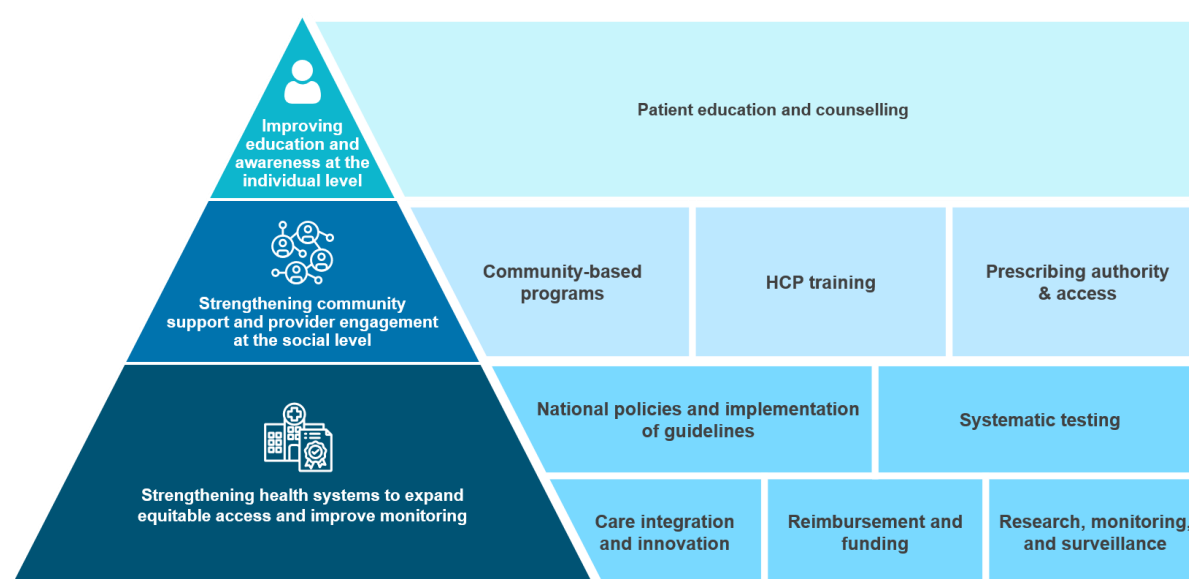
Looking across the countries included in the study, it is possible to identify policy best practices across the HIV care continuum. For prevention, although PrEP availability has expanded significantly, access often remains inequitable. Countries with free or subsidised PrEP and broader prescribing authority, such as Australia, France, Germany, Spain, and some parts of the UK, have achieved

higher uptake across population groups. Promising models include mobile PrEP outreach, culturally tailored education, and harm reduction programmes, though implementation and reach remain uneven. For diagnosis, targeted testing policies have improved early diagnosis and expanded access for key populations. Free community-based and anonymous testing services, along with self-testing, online postal kits, and rapid diagnostics, have made testing more accessible. Countries like Spain and the UK have adopted approaches to improve participation (opt-in and opt-out models respectively) in emergency departments and primary care, improving case detection in high-prevalence settings or for individuals who could benefit from PrEP or treatment. Technology-enabled solutions, such as automated reminders, have further supported uptake and early detection, demonstrating how targeted investments can reduce late diagnoses and close testing inequities.

In terms of treatment, the adoption of simplified ART regimens, including single-tablet options and long-acting injectables, can reduce the treatment burden for key populations that often face adherence challenges due to stigma, social barriers, or unstable living conditions. Regarding adherence and retention, digital tools, telehealth services, and widely available HIV care centres, in countries like Australia, Japan, and Spain, further improve continuity of care and successfully reach populations facing barriers to in-person care with specialists. Although these strategies have shown promise, they are not yet broadly integrated into national policies.

A call for policy action

Despite decades of progress, inequities in HIV outcomes persist in every country, driven by complex and context-specific factors at the individual, social, and health system levels. The UNAIDS Global AIDS Strategy 2026 to 2031 underscores that ending AIDS as a public health threat by 2030 will require more than service availability alone. HIV prevention, testing, treatment, and care must be accessible, acceptable, high-quality, person-centred, free from stigma and discrimination, and embedded within sustainable national health and community systems. Addressing these inequities requires coordinated policy action to expand equitable access to prevention and treatment, accelerate timely diagnosis and linkage to care, support durable viral suppression, strengthen community leadership and patient empowerment, and remove legal and structural barriers. Drawing on best practices, the following priority areas outline where countries can take bold, concrete steps to accelerate progress and deliver meaningful change for all people affected by HIV:



1. Improving awareness and education at individual-level

- **Patient education and counselling:** Expand culturally tailored HIV education, PrEP counselling, and anti-stigma campaigns to improve self-perception of HIV risk, increase testing awareness, and address adherence barriers. Programmes that embed peer educators and community health workers within the populations they serve have proven effective in delivering prevention information in trusted settings.⁶ For HIV diagnosis, increasing awareness and normalising routine testing are critical to reducing late diagnoses and undiagnosed infections.

2. Improving community support programmes and HCP engagement at social level

- **Community-based programmes:** Community-led initiatives and linguistically inclusive support can result in benefits across the care cascade. Expanding a range of community-led outreach programmes (e.g., education, testing distribution, peer support, patient navigation) can improve testing access, re-engage individuals in care, reduce stigma, and increase ART adherence.
- **HCP training:** Strengthen provider capacity through training on culturally competent HIV care, PrEP counselling, and ART initiation. Culturally competent provider training ensures that care is inclusive and responsive to diverse populations.
- **Prescribing authority and access:** Expand PrEP and ART prescribing authority and broaden access through decentralised delivery models such as telehealth, pharmacies, and community clinics. These changes are especially important for rural and socioeconomically disadvantaged populations.

3. Improving accessibility, funding, and monitoring at health system level

- **National policies and implementation of guidelines:** Embed equity into national HIV strategies by explicitly prioritising underserved populations and aligning with WHO and UNAIDS goals. Ensure policies go beyond publication to include mechanisms (e.g. data collection) that can track progress in closing gaps in care, prevention, and treatment. ART innovation should be recognised for its broader health system benefits beyond individual outcomes, including improved resource management and sustained prevention of transmission.
- **Systematic testing:** Systematic screening in healthcare entry points, expanding mobile testing units, and reimbursing self-tests and repeat testing will strengthen early detection and linkage to care. Reducing or eliminating the cost that falls on individuals through free community-based testing, prescription-free lab screening, and publicly funded online postal testing services can further reduce barriers, particularly for underserved populations. Strengthen national testing policies to improve early diagnosis by implementing context-appropriate testing strategies, including opt-out or opt-in models based on local prevalence and conditions. Testing strategies should be designed to proactively link individuals to prevention services like PrEP, particularly for those testing negative but with elevated HIV exposure.

⁶ Berg, R. C., Page, S., & Øgård-Repål, A. (2021). The effectiveness of peer-support for people living with HIV: A systematic review and meta-analysis. PLoS one, 16(6), e0252623.

- **Care integration and innovation:** Expand HIV testing in primary care, deploy mobile units in underserved areas, leverage digital innovations like telemedicine and remote adherence support, and integrate mental health services into ART retention programmes.
- **Coverage eligibility and reimbursement:** Remove financial barriers to care by broadening reimbursement eligibility for PrEP and ART to all key populations and individuals in need, including those often excluded such as PWID, sex workers, transgender people, heterosexuals with elevated HIV exposure, people in prisons, and undocumented migrants. Reduce out-of-pocket costs to facilitate access. Ensuring coverage of self-tests, free postal testing services, and repeat testing helps to streamline processes to prevent treatment delays.
- **Research, monitoring, and surveillance:** Strengthen data systems to track viral rebound, patient retention gaps, and enhance research on late diagnosis and prescribing disparities. The surveillance findings can be used to inform policy adjustments and improve healthcare resource allocation across key populations.

1. Introduction

1.1 Background

The AIDS epidemic is a global pandemic that began in 1981 and is still ongoing. Since the beginning of the epidemic, 91.4 million people have been infected with the HIV virus and about 44.1 million [37.6–53.4 million] people have died of HIV.⁷ One of the United Nations Sustainable Development Goals (SDGs) is to end AIDS as a public health threat by 2030.⁸ To reflect the progress towards this overarching goal, the Joint United Nations Program on HIV/AIDS (UNAIDS) UNAIDS established targets related to prevention, continuum of care, mortality, as well as the existing policy environment. UNAIDS 95-95-95 targets were adopted by United Nation Member States in June 2021. The targets were by 2025 to ensure that 95% of people living with HIV know their HIV status, 95% of people who know their status are receiving HIV treatment, and 95% of people on treatment are virally suppressed.⁹ The strategy also set ambitious prevention goals: ensuring that 95% of people at risk of HIV infection use appropriate combination prevention methods, and that at least 50% of people at substantial risk of HIV infection were using PrEP by 2025.

Building on this framework, the Global AIDS Strategy 2026–2031 reinforces the 2030 goal while introducing a stronger emphasis on population-level impact, equity, and sustainability.¹⁰ In addition to sustaining progress toward testing and treatment targets, the updated strategy sets forward-looking ambitions, including scaling to 40 million people on treatment and virally suppression and 20 million people accessing antiretroviral-based prevention tools globally by 2030. It places greater focus on ensuring that HIV services are not only available, but accessible, acceptable, and free from stigma and discrimination, recognising that service coverage alone is insufficient to end the epidemic. The strategy also underscores the importance of integrating HIV services into broader health systems, advancing universal health coverage, and expanding the use of innovative delivery models, including community-led services and long-acting prevention and treatment options.

There is much to be done to meet these targets, especially as the latest UNAIDS report shows that the 95-95-95 targets were not met, and progress has been slower than expected. UNAIDS suggests that 40.8 million people globally were living with HIV in 2024.¹¹ By the end of 2024, 31.6 million people were accessing antiretroviral therapy (ART), up from 7.7 million in 2010, but still short of the 34 million target for 2025. This means that nearly 25% of all people living with HIV are not accessing treatment. While many high-income countries have made substantial progress toward global HIV targets, they too must strengthen prevention, early diagnosis, care delivery, and stigma reduction efforts to fully end the epidemic.¹²

⁷ UNAIDS. (2025). Global HIV & AIDS statistics — Fact sheet. <https://www.unaids.org/en/resources/fact-sheet>

⁸ United Nations. Sustainable Development Goals. Available at: https://sdgs.un.org/goals/goal3#targets_and_indicators

⁹ UNAIDS. Understanding measures of progress towards the 95–95–95 HIV testing, treatment and viral suppression targets. Available at: https://www.unaids.org/sites/default/files/media_asset/progress-towards-95-95-95_en.pdf

¹⁰ UNAIDS. (2026). Global AIDS strategy 2026–2031. https://www.unaids.org/en/resources/documents/2026/2026%E2%80%932031_Global-AIDS-Strategy

¹¹ UNAIDS. (2025). Global HIV & AIDS statistics — Fact sheet. <https://www.unaids.org/en/resources/fact-sheet>

¹² Hader, S., Shibemba, M., Tanuma, J., Lubkeman, M., López, M., Yáñez, C., & Ragull, L. (2024, June). Going the extra mile to end the HIV epidemic: Learning from selected high-income countries' efforts to reach 2030 UNAIDS HIV goals. Boston Consulting Group.

Inequalities are stopping the world from ending AIDS, according to UNAIDS.¹³ Aligned with the Sustainable Development Goals and the UN System Framework for Action on Equality, the *Global AIDS Strategy 2021–2026: End Inequalities, End AIDS* places a central focus on tackling the inequalities that fuel the AIDS epidemic.¹⁴ The strategy defines inequality as an imbalance or lack of equity, encompassing disparities in HIV vulnerability, access to services, and health outcomes across different populations and settings. By emphasising the need to prioritise people who remain underserved or excluded from HIV prevention, treatment, and care, the strategy calls for bold action to close these gaps along the whole patient journey, from awareness through diagnosis and treatment.

A key part of addressing these inequalities and ending the epidemic is ensuring targeted attention to the populations most disproportionately affected by HIV. This is important because globally, certain high-prevalence groups (GBM, sex workers, transgender people, PWID, and incarcerated people) make up less than 5% of the global population, but they and their sexual partners accounted for 70% of all new HIV infections in 2021.¹⁵ Many people living with HIV face persistent discrimination, marginalisation, and instability.¹⁶ HIV prevalence among the adult population (ages 15–49) is 0.8% globally. However, prevalence is substantially higher among key populations, including 7.7% among gay and bisexual men (GBM), 3% among sex workers, 5% among people who inject drugs (PWID), and 9.2% among transgender people.¹⁷ The 2026–2031 strategy explicitly prioritises these populations, alongside women, youth, and migrants, and emphasises the need for tailored prevention approaches, expanded PrEP access, and sustained engagement in care to reduce new infections and improve long-term outcomes.¹⁸ Various populations remain at risk of being excluded from existing HIV prevention, testing and treatment systems. To ensure that no one is left behind, it is essential that new, innovative ways are found to reach key populations, addressing structural barriers to prevention and care.

There is growing recognition of the need for stronger data to address inequities in the HIV response. Tools like UNAIDS' inequalities visualization platform and the WHO Health Inequality Data Repository mark important progress, but significant gaps remain, particularly in country coverage, key population data, and detailed measures along the care cascade, such as late diagnoses, PrEP uptake, and viral suppression.¹⁹ The ECDC's annual HIV/AIDS surveillance in Europe includes data on GBM, migrants, heterosexual populations, and PWID, with regional metrics on prevalence and diagnoses.²⁰ However, it lacks consistent reporting on treatment outcomes and excludes many important populations and intersecting identities. Even still, many of the metrics collected across countries are useful to measure high-level progress against 95-95-95 targets and keep countries accountable, but they are insufficient

¹³ Joint United Nations Programme on HIV/AIDS. (2022). *Dangerous inequalities: World AIDS Day report 2022*. Geneva: UNAIDS.

¹⁴ Joint United Nations Programme on HIV/AIDS. (2021). *Global AIDS strategy 2021–2026: End inequalities. End AIDS*. UNAIDS. <https://www.unaids.org/en/Global-AIDS-Strategy-2021-2026>

¹⁵ Joint United Nations Programme on HIV/AIDS. (2022). *Dangerous inequalities: World AIDS Day report 2022*. Geneva: UNAIDS.

¹⁶ UNAIDS. *AIDS and the Sustainable Development Goals*. Available at: https://www.unaids.org/en/AIDS_SDGs

¹⁷ UNAIDS. *Global HIV & AIDS statistics—Fact sheet 2025*. Available at: <https://www.unaids.org/en/resources/fact-sheet>

¹⁸ UNAIDS. (2026). *Global AIDS strategy 2026–2031*. https://www.unaids.org/en/resources/documents/2026/2026%E2%80%932031_Global-AIDS-Strategy

¹⁹ Joint United Nations Programme on HIV/AIDS. (2024). *UNAIDS launches inequalities visualization tool*. https://www.unaids.org/en/resources/presscentre/featurestories/2024/may/20240520_inequalities-visualization-tool.; World Health Organization. (2025). *Health inequality data repository*. <https://www.who.int/data/inequality-monitor/data>.

²⁰ ECDC. (2025). *HIV/AIDS surveillance in Europe 2025 – 2024 data*. <https://www.ecdc.europa.eu/en/publications-data/hiv-aids-surveillance-europe-2025-2024-data>.

to inform country level actions to address them. The 2026–2031 strategy highlights the need for more granular, disaggregated, and timely data systems, including better measurement of prevention uptake, quality of care, and lived experiences, to enable more targeted and effective policy responses. Without more comprehensive and harmonised data, HIV policies risk falling short of addressing inequities and ending the epidemic.

Experts from Charles River Associates (CRA) Life Sciences Practice were commissioned by Gilead to assess the evidence base on the inequities in access to HIV treatment and care, and to identify policies to promote equitable access to HIV prevention and treatment. Focussing on high-income countries, this paper reviews the evidence on inequities, considers the policy progress that has been made targeting key populations, and set out measures that can be implemented to ensure more equitable access to innovations in HIV prevention and treatment. We adopt the term “key populations” per UNAIDS terminology guidance to refer to populations experiencing disproportionately poorer outcomes at various stages of the HIV care cascade.²¹

1.2 Methodology

We analysed the policy landscape across 8 countries: Australia, Canada, France, Germany, Italy, Japan, Spain, and the United Kingdom. These countries were selected because, despite having strong health system infrastructure and resources, they are advancing best practices that can inform the broader global effort to end the AIDS epidemic as a public health threat. At the same time, significant disparities in HIV outcomes persist. This analysis builds on the 2024 Boston Consulting Group report also commissioned by Gilead, titled *Going the Extra Mile to End the HIV Epidemic*, which included these countries and takes a deeper look at equity-focused HIV policies and practices.

We first reviewed the existing data on inequities and if this had been reviewed in national HIV plans. Key population groups are listed in Table 1, however across countries, the population focus reflects local epidemiology and societal trends. Individual country reports were first established, with common themes and trends identified to develop this overall policy narrative.

Table 1: Populations in scope

Category	Populations of interest
Gender and sexual orientation	• Gay and bisexual men (GBM) • Cisgender-heterosexual men • Cisgender-women • Transgender and non-binary people
Race, ethnicity, and nationality	• Racial and ethnic minorities • Indigenous people • Refugees • Migrants
Socio-economic status	• Low-income population • Homeless
Other vulnerable groups	• Persons who inject drugs (PWID) • Sex workers

²¹ Joint United Nations Programme on HIV/AIDS (UNAIDS). (2024). UNAIDS terminology guidelines.

- | | |
|--|---|
| | <ul style="list-style-type: none">• Incarcerated people |
|--|---|

To structure the policy literature review across countries, we developed a standardised framework along the HIV patient journey, which considered both prevention and treatment. This framework first considers the existence of targeted HIV policies at a national level and then follows the patient journey across 4 key policy areas: prevention, testing and diagnosis, treatment, and adherence and retention. When reviewing national HIV plans, we assessed their existence (and where absent, considered regional plans), whether they were binding, specific, or funded, and the extent to which they recognised inequalities, included tailored interventions for affected groups, and documented progress over time.

Within each of these policy areas, we listed several elements of analysis to create a structured and targeted approach to researching the policy environment, recognition of inequities, and data collection across key populations. Along these elements of analysis, we first reviewed data on inequalities published by international organisations and national health ministry websites before supplementing with academic and grey literature, sourced from PubMed and Google Scholar. For each domain, we searched for literature from 2018-2025 using combinations of keywords including, but not limited to “HIV policy,” “prevention,” “testing,” “diagnosis,” “ART,” “retention,” “adherence,” “inequity,” each of the key populations, and specific country names. After finding evidence of inequities, we explored evidence of their drivers when present.

1.3 Structure of the report

The remainder of this report is structured as follows:

- **Chapter 2** assesses the extent of inequities across the patient journey and the root causes of these inequities.
- **Chapter 3** sets out the policy progress targeting key populations, reviewing best practices and remaining gaps.
- **Chapter 4** set out recommendations to reduce inequity and improve access to innovations in HIV prevention and treatment.

2. Extent of inequities and root causes

The global HIV response has made significant strides in expanding access to prevention, testing, treatment, and retention services. However, to end the epidemic, the disparities that persist across the HIV care continuum, disproportionately affecting key populations will need to be addressed.²² Despite increasing availability of biomedical interventions like PrEP, improvements in testing infrastructure, and expanded ART coverage, there is a concern that particular groups continue to experience delayed access, poorer retention, and worse health outcomes and face different challenges to other patient groups. Addressing these inequities first requires data on the extent of inequities and then an understanding of the individual-, health system, and social-factors that contribute to them (which we collectively refer to as the root causes).

2.1 Monitoring and availability of data

Across countries, GBM are the most consistently prioritised and monitored key populations. However, a major limitation in this process is the ongoing inconsistency and incompleteness of disaggregated data. While data availability has improved in recent years, with more countries publishing indicators disaggregated by age, gender, and, to a limited extent, key population, reporting remains fragmented and uneven. Most countries do not systematically report outcomes across all stages of care for key populations such as PWID, transgender people, sex workers, and migrants. The absence of data should not be interpreted as evidence of equity, but rather as a gap in monitoring and accountability.

Appendices A, B, and C provide a structured overview of data availability across the HIV continuum, spanning prevention, diagnosis, and treatment, and highlight critical disparities in the granularity of surveillance systems. Appendix A demonstrates that HIV incidence data are the most widely reported and often disaggregated by key transmission groups such as GBM, heterosexual men and women, and PWID. However, reporting on migrants, racial and ethnic minorities, transgender people, and sex workers remains limited, and PrEP uptake data are rarely broken down by population. Appendix B shows that while many countries estimate the proportion of people living with HIV who are diagnosed, these figures are often not disaggregated to different populations. Late diagnosis is more consistently reported, but detailed population-level insights are scarce. Appendix C highlights the steepest decline in data availability: most countries report aggregate ART coverage and viral suppression rates, but few disaggregate by key population, and information on ART regimen types is often missing altogether or derived from non-surveillance sources.

Many high-income countries in Europe, North America, and the Asia-Pacific region lag in both the breadth and depth of population-specific reporting. While there has been progress, such as the inclusion of more population groups in the ECDC's annual HIV surveillance and new tools like the UNAIDS inequalities platform, comprehensive data across intersectional identities and longitudinal outcomes is still limited.

Our goal was not to provide a complete picture for every group in every setting, but to identify meaningful patterns where inequities were identified and substantiated by available evidence. This section examines the data on the extent of inequities across the patient journey and the root causes driving them. By identifying these challenges, this analysis lays the foundation for targeted policy interventions that can improve outcomes for key populations.

²² Joint United Nations Programme on HIV/AIDS. (2021). Global AIDS strategy 2021–2026: End inequalities. End AIDS. UNAIDS. <https://www.unaids.org/en/Global-AIDS-Strategy-2021-2026>

2.2 Prevention

Evidence on the extent of inequities

HIV incidence has remained stable or declined in high-income countries due to increased public awareness, PrEP adoption, testing, and treatment as prevention. Incidence among native-born GBM have fallen significantly, by around 33% in France and Australia over the past decade,²³ reflecting the success of targeted prevention efforts. However, this progress has not been true for other groups. Migrants now account for a growing share of new HIV cases, comprising over half in Australia²⁴ and Spain,²⁵ and nearly 40% in Italy²⁶ and France,²⁷ with incidence rising both at arrival and through transmission within migrant communities. Among migrant GBM in France, the number of diagnoses has increased by 105% since 2012, highlighting disparities in HIV prevention.²⁸ Evidence indicates that a significant share of these infections may be acquired post-migration, as factors like language barriers, precarious legal status, and limited access to healthcare impede prevention.²⁹ In Canada, 25% of new cases occur among PWID, and HIV incidence rates were five times higher than the national average in Saskatchewan and Manitoba, provinces with large Indigenous populations.³⁰ Meanwhile, countries do not consistently monitor incidence across transgender people, people experiencing homelessness or incarceration, and those engaging in activities associated with elevated HIV exposure (e.g., chemsex). As a result, monitoring changes across HIV incidence and outcomes is challenging across these groups.

PrEP has emerged as a powerful tool for HIV prevention in the last decade. Yet in 2024, only 344,596 people were on PrEP in the EU/EEA; about two-thirds of the 500,000-target set for 2025.³¹ This shortfall reflects not just a failure of scale, but of equity. While uptake is growing, it remains concentrated among urban, socioeconomically advantaged GBM. However, even among GBM, uptake still falls short of what is needed to comprehensively curb new HIV infections. In countries

²³ Sante publique France. (2024). VIH/sida. <https://www.santepubliquefrance.fr/maladies-et-traumatismes/infections-sexuellement-transmissibles/vih-sida/la-maladie/#tabs>; Le Guillou, A., Cabie, A., Delpierre, C., Pugliese, P., Jacomet, C., Hentzien, M., ... & Dat'AIDS study group. (2021). Dramatic decline in new HIV diagnoses in persons born in France in a large nationwide HIV cohort. *Public Health*, 196, 129-134.

²⁴ UNSW Kirby Institute. (2024). HIV, viral hepatitis and sexually transmissible infections in Australia Annual surveillance report 2024. https://www.kirby.unsw.edu.au/sites/default/files/documents/Annual-Surveillance-Report-2024_HIV_0.pdf.

²⁵ Ministerio de Sanidad. (2024). VIGILANCIA EPIDEMIOLÓGICA DEL VIH y SIDA EN ESPAÑA 2023. https://www.sanidad.gob.es/ciudadanos/enfLesiones/enfTransmisibles/sida/vigilancia/docs/Informe_VIH_SIDA_2023_Nov_2024_def.pdf.

²⁶ Regine, V., Pugliese, L., Ferri, M., Santaquilani, M., & Suligoi, B. (2023). Aggiornamento delle nuove diagnosi di infezione da HIV e dei casi di AIDS in Italia al 31 dicembre 2023. Centro Operativo AIDS, Istituto Superiore di Sanità. <https://www.epicentro.iss.it/aids/pdf/coa-2024.pdf>

²⁷ Sante publique France. (2024). VIH/sida. <https://www.santepubliquefrance.fr/maladies-et-traumatismes/infections-sexuellement-transmissibles/vih-sida/la-maladie/#tabs>

²⁸ Ibid.

²⁹ Palich, R., Arias-Rodríguez, A., Duracinsky, M., Le Talec, J. Y., Torrente, O. R., Lascoux-Combe, C., ... & GANYMEDE study group. (2024). High proportion of post-migration HIV acquisition in migrant men who have sex with men receiving HIV care in the Paris region, and associations with social disadvantage and sexual behaviours: results of the ANRS-MIE GANYMEDE study, France, 2021 to 2022. *Eurosurveillance*, 29(11), 2300445.

³⁰ Government of Canada. (2024). Canada's progress towards ending the HIV epidemic, 2022. <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/canada-progress-towards-ending-hiv-epidemic-2022.html>

³¹ ECDC. (2025). Pre-exposure prophylaxis for HIV prevention in Europe and Central Asia: Monitoring the implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2025 progress report (2024 data).

such as France, only 33% of GBM who need PrEP are receiving it, while in the UK that figure rises to nearly 79%.³² These examples highlight remaining gaps: not all GBM who could benefit from PrEP receive it.

Other groups remain even further behind, and face inequities in PrEP access compared to GBM:

- **Women:** Across multiple European countries, Australia, and Canada, fewer than 5% of PrEP users are women overall, despite women making up over 10% percent of new HIV diagnoses in some settings.³³ In Spain, for instance, women comprise nearly 14% of new HIV cases but under 1% of PrEP users.³⁴
- **Migrants:** Migrants likewise face legal and administrative barriers that often exclude them from subsidised or free PrEP. In 2023, migrants in the UK constituted just 7.6% of those on PrEP while comprising 61% of new diagnoses, excluding individuals who were diagnosed abroad.³⁵
- **Transgender people:** PrEP uptake data among transgender people is scarcely reported. In Germany, only 1.2% of PrEP users are trans or non-binary people, although it is unclear what their reach has been.³⁶
- **Sex workers and PWID:** There is little data on access to PrEP, but as many countries do not formally recognise sex workers and PWID as eligible populations for PrEP, we can infer they may face reduced access to PrEP as a biomedical prevention option.³⁷ In 2024, Italy and Spain began disaggregated reporting of PrEP usage among sex workers.

³² Ibid.

³³ de Gage, S. B., Desplas, D., & Dray-Spira, R. (2022). Roll-out of HIV pre-exposure prophylaxis use in France: a nationwide observational study from 2016 to 2021. *The Lancet Regional Health–Europe*, 22.; División de Control de VIH, ITS, Hepatitis virales y Tuberculosis. (2024). Informe de resultados del Sistema de información de programas de Profilaxis Pre-exposición al VIH en España (SIPrEP). Ministerio de Sanidad, julio 2024.; Coukan, F., Murray, K. K., Papageorgiou, V., Lound, A., Saunders, J., Atchison, C., & Ward, H. (2023). Barriers and facilitators to HIV pre-exposure prophylaxis (prep) in specialist sexual health services in the United Kingdom: a systematic review using the prep care continuum. *HIV medicine*, 24(8), 893-913.; Chidwick, K., Pollack, A., Busingye, D., Norman, S., Grulich, A., Bavinton, B., ... & Medland, N. (2022). Utilisation of pre-exposure prophylaxis (PrEP) for HIV prevention in the Australian general practice setting: a longitudinal observational study. *Sexual Health*, 19(2), 101-111.

³⁴ División de Control de VIH, ITS, Hepatitis virales y Tuberculosis. (2024). Informe de resultados del Sistema de información de programas de Profilaxis Pre-exposición al VIH en España (SIPrEP). Ministerio de Sanidad, julio 2024. <https://siprep.isciii.es/en/documentos>

³⁵ Coukan, F., Murray, K. K., Papageorgiou, V., Lound, A., Saunders, J., Atchison, C., & Ward, H. (2023). Barriers and facilitators to HIV pre-exposure prophylaxis (prep) in specialist sexual health services in the United Kingdom: a systematic review using the prep care continuum. *HIV medicine*, 24(8), 893-913.; UK Health Security Agency. (2024). HIV testing, PrEP, new HIV diagnoses and care outcomes for people accessing HIV services: 2024 report.

³⁶ ECDC. (2024). Midterm review of the implementation and impact of Germany's BIS 2030 strategy for the prevention and control of HIV, hepatitis B and C, and other STIs.

³⁷ Ministerio de Sanidad. (2021). Strategic Plan for the Prevention and Control of HIV and other Sexually Transmitted Infections in Spain 2021-2030.; ECDC. (2025). Pre-exposure prophylaxis for HIV prevention in Europe and Central Asia: Monitoring the implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2025 progress report (2024 data).; Deutsche Aidshilfe. (2024). Information on PrEP and PEP for all sex workers and simplified access.

- Rural and socioeconomically disadvantaged populations:** Limited healthcare infrastructure outside urban centres further exacerbate disparities in PrEP access. Through 2021 in France, for example, 74% of PrEP users were in urban settings and 93% were not socioeconomically disadvantaged.³⁸ While data on HIV incidence is not disaggregated by rural and low-income populations for comparison, low uptake of PrEP among these groups suggests there may be access challenges. Similarly, in Australia, 86.7% of PrEP users resided in major cities.³⁹

Root causes

Several papers have investigated the cause of inequity in access to PrEP. On an individual level, many potential users remain unaware of PrEP or fail to perceive themselves as having sufficient HIV exposure to justify seeking it out.⁴⁰ Although HIV prevention campaigns often focus on GBM, many individuals, particularly women, people in non-urban settings, and those from migrant backgrounds, are not reached by these campaigns.⁴¹ Fear of side effects, concerns about medication adherence, or simply not knowing where and how to obtain PrEP vary across patient groups and can also pose substantial deterrents.⁴² Misconceptions, such as believing PrEP is only for gay men or highly sexually active people, further limit its perceived relevance.⁴³

Stigma surrounding PrEP continues to play a profound role in limiting access. For women, migrants, and transgender women, additional layers of discrimination reduce the likelihood of seeking PrEP.⁴⁴ In some migrant communities, PrEP is associated with promiscuity or sex work, and its use may be viewed as socially unacceptable.⁴⁵ These perceptions, shaped by cultural norms and stigma toward LGBT+ identities, can deter individuals from seeking PrEP, even when they could benefit from PrEP. Stigma also operates within healthcare settings. Criminalization of certain behaviours and populations, including sex work and drug use, can deter individuals from engaging with prevention services or disclosing

³⁸ de Gage, S. B., Desplas, D., & Dray-Spira, R. (2022). Roll-out of HIV pre-exposure prophylaxis use in France: a nationwide observational study from 2016 to 2021. *The Lancet Regional Health–Europe*, 22.

³⁹ Chidwick, K., Pollack, A., Busingye, D., Norman, S., Grulich, A., Bavinton, B., ... & Medland, N. (2022). Utilisation of pre-exposure prophylaxis (PrEP) for HIV prevention in the Australian general practice setting: a longitudinal observational study. *Sexual Health*, 19(2), 101-111.

⁴⁰ Whelan, I., Strachan, S., Apea, V., Orkin, C., & Paparini, S. (2023). Barriers and facilitators to HIV pre-exposure prophylaxis for cisgender and transgender women in the UK. *The Lancet HIV*, 10(7), e472-e481.; Guillaumet, L. J. V., Valencia, J., Ryan, P., Cuevas-Tascón, G., del-Olmo-Morales, M. A., Cobo, I., ... & Cheavance, G. (2024). Determinants of Intention to Use HIV Pre-exposure Prophylaxis and Condom Use Among a Sample of Cisgender Female Sex Workers Working Mostly Outdoors in Madrid, Spain. *Archives of Sexual Behavior*, 53(7), 2817.; Deutsche Aidshilfe. (2024). Information on PrEP and PEP for all sex workers and simplified access.; Di Ciaccio, M., Villes, V., Delabre, R. M., Alain, T., Morel, S., Michels, D., ... & Rojas Castro, D. (2024). When awareness is not a barrier to PrEP uptake among men who have sex with men who are eligible for PrEP in France. *AIDS care*, 36(3), 390-399.

⁴¹ Tieosapjaroen, W., Zhang, Y., Fairley, C. K., Zhang, L., Chow, E. P., Phillips, T. R., ... & Ong, J. J. (2023). Improving access to oral pre-exposure prophylaxis for HIV among international migrant populations. *The Lancet Public Health*, 8(8), e651-e658.

⁴² Philpot, S. P., Prestage, G., Holt, M., Maher, L., Haire, B., Bourne, A., & Hammoud, M. A. (2023). Reasons for not using HIV Pre-Exposure Prophylaxis (PrEP) among gay and bisexual men in Australia: mixed-methods analyses from a national, online, observational study. *Behavioral Medicine*, 49(3), 271-282.

⁴³ Ibid.

⁴⁴ Whelan, I., Strachan, S., Apea, V., Orkin, C., & Paparini, S. (2023). Barriers and facilitators to HIV pre-exposure prophylaxis for cisgender and transgender women in the UK. *The Lancet HIV*, 10(7), e472-e481.

⁴⁵ Tieosapjaroen, W., Zhang, Y., Fairley, C. K., Zhang, L., Chow, E. P., Phillips, T. R., ... & Ong, J. J. (2023). Improving access to oral pre-exposure prophylaxis for HIV among international migrant populations. *The Lancet Public Health*, 8(8), e651-e658.

activities associated with elevated HIV exposure to healthcare providers. Criminalization can also limit the reach of harm reduction and outreach programmes, reinforcing structural exclusion from prevention tools.

Health system factors contributing to inequitable PrEP access include coverage and reimbursement eligibility. In 2024, across 45 European and Central Asian countries, 39 included GBM in PrEP eligibility, but only 32 explicitly covered transgender people, 27 included sex workers, 27 included heterosexuals with elevated HIV exposure, 23 covered PWID, and just 9 allowed people in prisons to access PrEP.⁴⁶ Cost-sharing models, insufficient insurance coverage, and outright exclusions for undocumented migrants create additional hurdles, with out-of-pocket costs often proving prohibitive, as seen in Italy before recent reimbursement, and in Japan and several Canadian provinces, where unsubsidised PrEP means that it is largely available to only wealthier urban populations.⁴⁷

Other health system factors impacting PrEP access include prescriber regulations, availability, and awareness. In some countries, only specialists are allowed to prescribe PrEP, which limits access to clinics in major cities and makes it harder for people in other areas to get it.⁴⁸ Even where PrEP is fully reimbursed, organisational constraints can limit prescribing beyond hospital settings, leaving women and migrants underserved.⁴⁹ Unreliable follow-up and counselling, particularly for those who procure PrEP through informal channels, can lead to lower adherence, higher discontinuation, and a missed opportunity to maximise prevention outcomes.⁵⁰ In rural or economically disadvantaged regions, the availability of trained practitioners or dedicated public health services that can prescribe, monitor, and support PrEP use can be limited.⁵¹ Low provider awareness, particularly among GPs where they can prescribe or refer, can further hinder outreach and counselling, with clinicians potentially neglecting to

⁴⁶ ECDC. (2024). Pre-exposure prophylaxis for HIV prevention in Europe and Central Asia – Monitoring implementation of the Dublin Declaration on Partnership to fight HIV/AIDS in Europe and Central Asia: 2023 progress report. <https://www.ecdc.europa.eu/en/publications-data/hiv-pre-exposure-prophylaxis-prevention-dublin-declaration-2023>.

⁴⁷ PrEP was approved in Japan in August 2024 but is not reimbursed at the time of this writing. NAVLIN. (2024). Japanese Council Approves Truvada, Offers no Health Coverage. <https://www.navlindaily.com/article/20515/japanese-council-approves-truvada-offers-no-health-coverage>; Venturelli, S., Mezzadri, L., Bana, N., Comi, L., Borghi, F., Ouabou, A., & Ripamonti, D. (2024). SC-13 Impact of PrEP cost on prophylaxis initiation in an Italian centre.; Kōsei Rōdō Kagaku Kenkyūhi Hojo Kin [AIDS Policy Research Project]. (2021). Research on improving the HIV testing system and effective recommendations for testing: Support leading to HIV testing behavior among MSM and gay/bisexual men. Takayuki Honma (Faculty of Nursing, Yamanashi Prefectural University) & Kota Iwahashi (Nonprofit Organization akta). (In Japanese).; Philpot, S. P., Prestage, G., Holt, M., Maher, L., Haire, B., Bourne, A., & Hammoud, M. A. (2023). Reasons for not using HIV Pre-Exposure Prophylaxis (PrEP) among gay and bisexual men in Australia: mixed-methods analyses from a national, online, observational study. *Behavioral Medicine*, 49(3), 271-282.

⁴⁸ ECDC. (2024). Pre-exposure prophylaxis for HIV prevention in Europe and Central Asia – Monitoring implementation of the Dublin Declaration on Partnership to fight HIV/AIDS in Europe and Central Asia: 2023 progress report.

⁴⁹ Ghosn, J., & Chaix, M.-L. (2026). Towards more accessible and more inclusive PrEP to break the cycle of HIV in France. *Journal of the International AIDS Society*, 29, e70118. <https://doi.org/10.1002/jia2.70118>

⁵⁰ Nishiura, H., Fujiwara, S., Imamura, A., & Shirasaka, T. (2025). Regional variations in HIV diagnosis in Japan before and during the COVID-19 pandemic. *Infectious Disease Modelling*, 10(1), 40-49.; Mizushima, D., Gatanaga, H., & Oka, S. (2024). Advances in HIV management and challenges in Japan: Current situation of pre-exposure prophylaxis in Tokyo, Japan. *Global Health & Medicine*, 6(5), 304-309.

⁵¹ Nozza, S., Mazzotta, V., Masoero, T., Taveili, A., Leserri, F., Taramasso, L., ... & Antinori, A. (2024). OC-50 Implementation of PrEP in Italy: results of PrIDE survey.; Nishiura, H., Fujiwara, S., Imamura, A., & Shirasaka, T. (2025). Regional variations in HIV diagnosis in Japan before and during the COVID-19 pandemic. *Infectious Disease Modelling*, 10(1), 40-49.

inform demographics beyond GBM about its availability and benefits.⁵² These missed opportunities are well documented: in one study, over 90% of people with recently acquired HIV had consulted a physician in the prior year, yet only a quarter received information about PrEP and just 5% had used it.⁵³

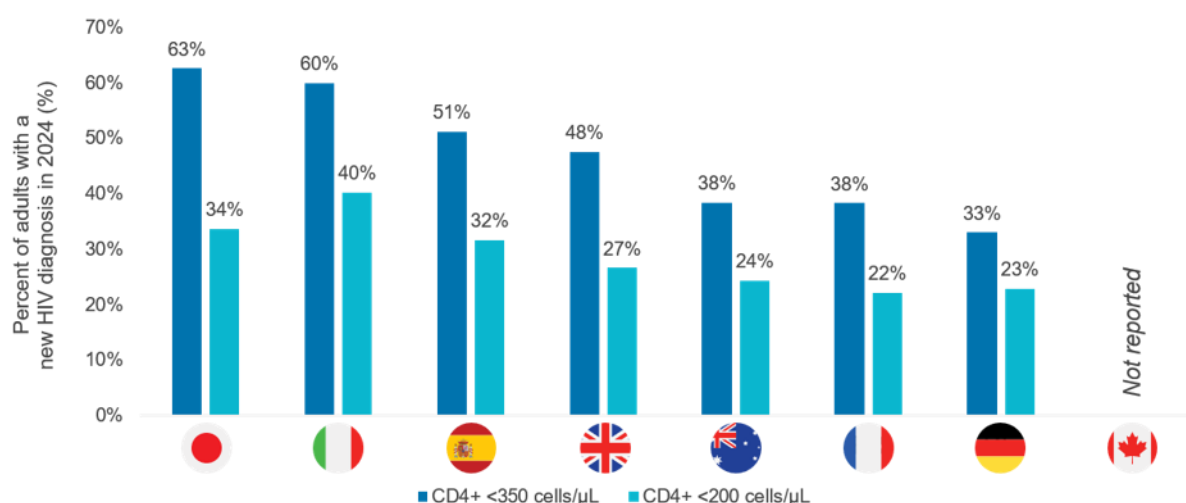
Despite significant progress in expanding PrEP access across high-income countries, major inequities persist across population groups and geographies. Uptake remains concentrated among urban, socioeconomically advantaged GBM, while women, migrants, transgender people, sex workers, people who inject drugs, and rural communities remain underserved due to a combination of low awareness, stigma, restrictive guidelines, limited provider outreach, and structural health system barriers. These disparities are exacerbated by cost-sharing models, administrative hurdles, and narrow prescribing policies that limit access in high-need populations, highlighting the need for more inclusive prevention strategies and targeted investments to close the gap.

2.3 Testing and diagnosis

Evidence on extent of inequities

Late diagnosis remains a persistent global challenge, with significant public health implications. As shown in Figure 1, Japan reports the highest late diagnosis rate, with 63% of newly diagnosed individuals presenting with CD4 counts below 350 cells/μL, followed by Italy (60%), Spain (51%), and the UK (48%). Late diagnosis rates are lower but still notable in Australia (38%), France (38%), and Germany (33%).

Figure 1: Percent of adults with late HIV diagnosis by country in 2024



Sources: ECDC. (2025). *HIV/AIDS surveillance in Europe 2025 (2024 data)*.; UNSW Kirby Institute. (2025). *HIV, viral hepatitis and sexually transmissible infections in Australia Annual surveillance report 2025*.; AIDS Prevention Information Network. (2025). *Situation in Japan: AIDS Trend Committee - 2024 AIDS Trends Annual Report (January 1 to December 31)*.

⁵² Rai, B., Ross, S., & Richardson, D. (2021). P051 General practitioners' (GPs') knowledge of and attitudes to prescribing pre-exposure prophylaxis for HIV (PrEP): A pilot study.; Nozza, S., Mazzotta, V., Masoero, T., Tavelli, A., Leserri, F., Taramasso, L., ... & Antinori, A. (2024). OC-50 Implementation of PrEP in Italy: results of PrIDE survey.

⁵³ Lions, C., Laroche, H., Mora, M., Pialoux, G., Cotte, L., Cua, E., Piroth, L., Molina, J.-M., Salnikova, M., Maradan, G., Poizot-Martin, I., & Spire, B. (2023). Missed opportunities for HIV pre-exposure prophylaxis among people with recent HIV infection: The French ANRS 95041 OMaPrEP study. *HIV Medicine*, 24(2), 191–201. <https://doi.org/10.1111/hiv.13367>

Beyond these figures, many individuals are diagnosed at an even more advanced stage, with CD4 counts below 200 cells/ μ L, signalling severe immunosuppression and increased risks of opportunistic infections. Italy (40%), Japan (34%), Spain (32%), and the UK (27%) report some of the highest rates in this category.

Despite expanded testing initiatives and the introduction of diverse diagnostic tools, many countries continue to struggle with identifying cases early, especially among key populations. Country level data show that the proportion of people who are diagnosed at a late stage, is particularly low among migrants, women, PWID, older adults, and certain ethnic minority groups.⁵⁴ Across the EU/EEA, the highest rates of late HIV diagnosis (CD4 < 350 cells/mm³) were observed among women (51.6%), older adults (61.3% for those over 50), heterosexual men (59.9%) and women (52.6%), and migrants from South and South-East Asia (52.7%) and Sub-Saharan Africa (53.8%).⁵⁵ In contrast, lower rates were seen among younger individuals (39.8% for ages 20–24), men who have sex with men (39.0%), and people from Western Europe (42.5%).

While most high-income countries report the aggregate proportion of PLWH who are diagnosed as part of the UNAIDS targets, data on inequities in undiagnosed HIV, such as differences by population group, geography, or other social factors, are much scarcer. However, where present, the data suggest similar trends to those seen with late diagnoses. For example, in Australia in 2024, an estimated 6.3% of people living with HIV were undiagnosed, with higher rates among people born in Southeast Asia (23.3%), people born overseas (11.6%), and women (7.3%) compared to 2.9% among Australian-born non-Indigenous people.⁵⁶ In Canada, urban GBM were more likely to be aware of their diagnosis (98%) compared to Indigenous populations (64–88%), PWID (83%).⁵⁷ Where data exist, they often show that most key groups, such as homeless migrant women in France, rarely engage in early HIV testing, remaining undiagnosed for extended periods and missing out on timely care.⁵⁸

Looking at data from countries on late diagnosis in our study highlights the inequities in late diagnoses across different groups:

- Migrants face significantly delayed testing. In France, migrant GBM and sub-Saharan African-born heterosexuals experience significantly delayed testing, often receiving an HIV diagnosis years after infection.⁵⁹ Similarly, in Australia, more than 50% of new diagnoses among migrants from Oceania, Southeast Asia, and sub-Saharan Africa occur late.⁶⁰

⁵⁴ Collins, S., Namiba, A., Sparrowhawk, A., Strachan, S., Thompson, M., & Nakamura, H. (2022). Late diagnosis of HIV in 2022: Why so little change? *HIV medicine*, 23(11), 1118-1126.

⁵⁵ ECDC. (2025). HIV/AIDS surveillance in Europe 2025 (2024 data).

⁵⁶ UNSW Kirby Institute. (2025). HIV, viral hepatitis and sexually transmissible infections in Australia Annual surveillance report 2025.

⁵⁷ Government of Canada. (2024). Canada's progress towards ending the HIV epidemic, 2022.

⁵⁸ Poncet, L., Panjo, H., Ringa, V., & Andro, A. (2021). Do vulnerable groups access prevention services? Cervical cancer screening and HIV testing among homeless migrant women in the Paris metropolitan area. *PLoS One*, 16(8), e0255900.

⁵⁹ Sante publique France. (2024). VIH/sida. <https://www.santepubliquefrance.fr/maladies-et-traumatismes/infections-sexuellement-transmissibles/vih-sida/la-maladie/#tabs>.

⁶⁰ Australian Government. (2024). Ninth National HIV Strategy. <https://www.health.gov.au/sites/default/files/2024-12/ninth-national-hiv-strategy-2024-2030.pdf>

- Racial and ethnic disparities are also evident. In the UK, 50% of adult Black African heterosexuals newly diagnosed with HIV were diagnosed late compared to under a third of gay and bisexual men.⁶¹
- Heterosexual men and women are also disproportionately affected. In Italy, 67% of heterosexual men and 63% of women diagnosed between 2021 and 2023 were diagnosed late, compared to 52% of GBM.⁶²
- Older adults also face disproportionate burdens: more than 70% of Italians over 50 were diagnosed late, and across Europe, 66% of individuals over 50 receive a late diagnosis, compared to just 40% of those under 30.⁶³

Although not the focus of our study, there is also evidence on regional differences. In Canada, some provinces like British Columbia have met global targets for 95% of PLWH being diagnosed, while others like Saskatchewan and Manitoba report only 73% and 83% of PLWH being diagnosed, respectively.⁶⁴ Data collection is also inconsistent across certain provinces and territories, hindering a coherent national approach. Japan exhibits regional variations in undiagnosed HIV, with areas like Kyusyu/Okinawa and Chugoku/Shikoku having high proportions (19.5% and 16.7%, respectively) of PLWH never tested or diagnosed compared to major cities.⁶⁵ Similar inequities surface worldwide, reflecting how local resource allocation, policy frameworks, and public health priorities can profoundly shape testing availability and uptake.

Root causes

A recurring barrier to timely diagnosis is low self-perceived HIV exposure. As is the case for PrEP usage, many heterosexuals, older adults, or newly arrived migrants do not believe they face appreciable HIV exposure, leading to later or missed testing opportunities.⁶⁶ Lack of awareness about existing HIV testing methods, including self-testing kits, or the need for repeat testing further compounds the problem.⁶⁷ Personal economic instability and homelessness also dissuade or delay testing, as daily survival needs overshadow preventive healthcare. As a result, late diagnoses often

⁶¹ UK Health Security Agency. (2026, April 15). HIV testing, PrEP, new HIV diagnoses and care outcomes for people accessing HIV services: 2025 report. GOV.UK. <https://www.gov.uk/government/statistics/hiv-annual-data/hiv-testing-prep-new-hiv-diagnoses-and-care-outcomes-for-people-accessing-hiv-services-2025-report>.

⁶² Regine, V., Pugliese, L., Ferri, M., Santaquilani, M., & Suligoi, B. (2023). Aggiornamento delle nuove diagnosi di infezione da HIV e dei casi di AIDS in Italia al 31 dicembre 2023. Centro Operativo AIDS, Istituto Superiore di Sanità. <https://www.epicentro.iss.it/aids/pdf/coa-2024.pdf>

⁶³ ECDC. (2024). HIV/AIDS surveillance in Europe 2024 (2023 data).; Regine, V., Pugliese, L., Ferri, M., Santaquilani, M., & Suligoi, B. (2023). Aggiornamento delle nuove diagnosi di infezione da HIV e dei casi di AIDS in Italia al 31 dicembre 2023. Centro Operativo AIDS, Istituto Superiore di Sanità. <https://www.epicentro.iss.it/aids/pdf/coa-2024.pdf>

⁶⁴ Government of Canada. (2024). Canada's progress towards ending the HIV epidemic, 2022.

⁶⁵ Nishiura, H., Fujiwara, S., Imamura, A., & Shirasaka, T. (2025). Regional variations in HIV diagnosis in Japan before and during the COVID-19 pandemic. *Infectious Disease Modelling*, 10(1), 40-49.

⁶⁶ Boesecke, C., Schellberg, S., Schneider, J., Schuettfort, G., & Stocker, H. (2023). Prevalence, characteristics and challenges of late HIV diagnosis in Germany: an expert narrative review. *Infection*, 51(5), 1223-1239.

⁶⁷ Guerras, J. M., Belza, M. J., Fuster, M. J., Fuente, L. D. L., García de Olalla, P., Palma, D., ... & Methysos Project Group. (2022). Knowledge and prior use of hiv self-testing in madrid and barcelona among men who have sex with men more than one year after its legal authorization in Spain. *International journal of environmental research and public health*, 19(3), 1096.; UK Health Security. (2024). HIV testing, PrEP, new HIV diagnoses and care outcomes for people accessing HIV services: 2024 report.; Japanese Red Cross Society, Blood Service Headquarters. (2023, November 20). Interview items related to AIDS (HIV) and sexual contact. Ministry of Health, Labour and Welfare. <https://www.mhlw.go.jp/content/11127000/001168594.pdf>

occur when individuals test after experiencing symptoms rather than after exposure or through routine testing, as was the case for 35% of new diagnoses in Italy in 2023.⁶⁸

Stigma and discrimination remain powerful deterrents. Fears around judgment, confidentiality breaches, or even criminalization often dissuade key populations—such as migrants, sex workers, PWID, and racial/ethnic minorities—from seeking testing.⁶⁹ Women, especially migrant women, can be inhibited by prevailing gender norms that discourage open discussion of sexual health.⁷⁰ Among homeless individuals and elderly populations, social isolation exacerbates barriers to testing.⁷¹ Cultural or language differences add another layer of complexity for migrants, making it less likely they will navigate local health systems or seek testing in a timely manner.⁷² In Japan, foreign residents may be excluded from affordable testing, and in parts of Canada, a lack of culturally competent services limits Indigenous peoples' engagement with testing.⁷³

At a systemic level, primary care and specialised clinics do not always integrate routine HIV screening, due to low provider awareness or inconsistent health centre policies, leading to missed opportunities for early detection.⁷⁴ In Australia, for example, HCPs were found to have low awareness of HIV risk factors for women.⁷⁵ Meanwhile, cost remains a barrier for people outside national insurance schemes or public health centres, such as in private out-of-pocket clinics in Japan.⁷⁶

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- ⁶⁸ Regine, V., Pugliese, L., Ferri, M., Santaquilani, M., & Suligoi, B. (2023). Aggiornamento delle nuove diagnosi di infezione da HIV e dei casi di AIDS in Italia al 31 dicembre 2023. Centro Operativo AIDS, Istituto Superiore di Sanità.
- ⁶⁹ Philpot, S. P., Mao, L., Cifali, D., Power, C., Templeton, D. J., Robinson, S., ... & Bavinton, B. R. (2023). Stigma regarding HIV and sexual identity as barriers to accessing HIV testing and prevention services among gay and bisexual migrants in Australia. *Sexuality Research and Social Policy*, 20(3), 964-976.
- ⁷⁰ Pourette, D. (2008). Migratory paths, experiences of HIV/AIDS, and sexuality: African women living with HIV/AIDS in France. *Feminist Economics*, 14(4), 149-181.; Poncet, L., Panjo, H., Ringa, V., & Andro, A. (2021). Do vulnerable groups access prevention services? Cervical cancer screening and HIV testing among homeless migrant women in the Paris metropolitan area. *PLoS One*, 16(8), e0255900.
- ⁷¹ Fakoya, I., Álvarez-Del Arco, D., Monge, S., Copas, A. J., Gennotte, A. F., Volny-Anne, A., ... & Skoutelis, A. (2018). HIV testing history and access to treatment among migrants living with HIV in Europe. *Journal of the International AIDS Society*, 21, e25123.; Australian Government. (2023). HIV Taskforce Report.
- ⁷² Ministry of Health, Labour and Welfare. (n.d.). HIV testing sessions for foreign residents [外国語HIV検査会報告書]. https://mhlw-grants.niph.go.jp/system/files/report_pdf/8_1%E5%A4%96%E5%9B%BD%E8%AA%9EHIV%E6%A4%9C%E6%9F%BB%E4%BC%9A.pdf
- ⁷³ Kitajima, T., Sawada, T., Miyakubi, H., & Tran, T. H. (2022). Implementation of HIV testing sessions for foreign residents in Japan: A multilingual access model to improve HIV testing and care access [在留外国人を対象としたHIV検査会の実施]. In FY2021 Research Report on AIDS Policy Studies funded by the Ministry of Health, Labour and Welfare (pp. 29–33). https://mhlw-grants.niph.go.jp/system/files/report_pdf/8_1%E5%A4%96%E5%9B%BD%E8%AA%9EHIV%E6%A4%9C%E6%9F%BB%E4%BC%9A.pdf; The Manitoba HIV Program. (2024). The Manitoba HIV Program Report. <https://mbhiv.ca/program-reports/>; Government of Canada. (2024). Canada's progress towards ending the HIV epidemic, 2022.; Negin, J., Aspin, C., Gadsden, T., & Reading, C. (2015). HIV among indigenous peoples: a review of the literature on HIV-related behaviour since the beginning of the epidemic. *AIDS and Behavior*, 19, 1720-1734.
- ⁷⁴ CCDDR. (2021). Systematic review of the barriers for HIV testing in Canada; 2009–2019.; Scanvion, A., Vignier, N., Durand, F., Poupon-Ferron, S., & Billaud, E. (2023). Heterogeneity of HIV testing practices in free healthcare centers in France: A national demonstration study. *Infectious Diseases Now*, 53(7), 104726.
- ⁷⁵ Australian Government. (2023). HIV Taskforce Report. <https://www.health.gov.au/sites/default/files/2024-07/hiv-taskforce-report.pdf>.
- ⁷⁶ Tokyo Weekender. (2024). Where to get tested for STDs in Tokyo. <https://www.tokyoweekender.com/japan-life/news-and-opinion/where-to-get-tested-for-stds-in-tokyo/>

Late HIV diagnosis remains a widespread challenge with serious implications for individual and public health, particularly among key populations. Despite efforts to expand testing, data show that migrants, heterosexuals, women, older adults, PWID, and racial or ethnic minorities are consistently diagnosed later and at more advanced stages. These inequities are shaped by a complex mix of low self-perceived HIV exposure, stigma, cultural and linguistic barriers, housing and economic insecurity, and gaps in provider awareness or health system integration. Regional disparities and data inconsistencies further compound the issue, highlighting the need for more targeted, inclusive, and culturally competent testing strategies.

2.4 Treatment

Evidence on extent of inequities

Despite overall improvements in ART availability worldwide, many key populations still face fragmented care pathways marked by delayed treatment initiation, missed opportunities for timely prescribing, and inequitable access to optimal regimens. Migrants in particular face significant challenges across countries. Historic data from 2013-2017 suggests that in Australia, 85% of migrants with HIV diagnoses had been taking ART compared to 90% of non-migrants.⁷⁷ Additionally in Japan, just 74.4% of infected migrants are on ART, lower than Japanese natives, a gap that has been linked to insurance challenges and limited multilingual support.⁷⁸ Gender differences are also stark. In Canada, there are reports of notable gaps among women (84% on ART) and Indigenous people (81–88%) compared to men overall (86%) and urban GBM (98%).⁷⁹

Delays in ART initiation further compound these gaps. In Japan, only 8.2% of individuals with acute or recent HIV infections began ART within two weeks in 2020, and over 1 in 3 people with advanced disease started six weeks or later.⁸⁰ In Italy, migrants, particularly from Sub-Saharan Africa, Latin America, and Eastern Europe, experience delayed treatment initiation and are nearly twice as likely to be lost to follow-up.⁸¹ In Spain, 39% of newly arrived Latin American asylum seekers lacked ART access in their first six months, and one third had detectable viral loads.⁸² Although suppression improved dramatically after access barriers were addressed, these early treatment delays underscore the consequences of reactive and fragmented systems.

⁷⁷ Marukutira, T., Gray, R. T., Douglass, C., El-Hayek, C., Moreira, C., Asselin, J., ... & Hellard, M. (2020). Gaps in the HIV diagnosis and care cascade for migrants in Australia, 2013–2017: A cross-sectional study. *PLoS medicine*, 17(3), e1003044.

⁷⁸ Sawada, T., Yamamoto, Y., Tsukada, N., Yokomaku, N., Iwamuro, S., Tarui, M., & Nakao, Y. (2020). 日本における HIV 陽性外国人の受療を阻害する要因に関する研究 [Factors inhibiting healthcare access among HIV-positive foreign residents in Japan]. *Japanese Journal of AIDS Research*, 22, 172–181. <https://jaids.jp/pdf/2020/20202203/20202203172181.pdf>

⁷⁹ Government of Canada. (2024). Canada's progress towards ending the HIV epidemic, 2022.

⁸⁰ Yotsumoto, M., Kinai, E., Watanabe, H., Watanabe, D., & Shirasaka, T. (2023). Latency to initiation of antiretroviral therapy in people living with HIV in Japan. *Journal of Infection and Chemotherapy*, 29(10), 997-1000.

⁸¹ Prinapori, R., et al. (2018). Predictors of retention in care in HIV-infected patients in a large hospital cohort in Italy. *Epidemiology & Infection*, 146(5), 606-611.; d'Arminio Monforte, A., et al. (2020). Virological response and retention in care according to time of starting ART in Italy: data from the Icona Foundation Study cohort. *Journal of Antimicrobial Chemotherapy*, 75(3), 681-689.; Gazzola, L., et al. (2024). TD-5 Rapid ART initiation and Retention in care of people living with HIV: a six-years observational study in foreigners versus Italian-borne.

⁸² Ryan, P., Manzano, S., Deihim-Rahampour, N., Cuevas, G., Martin-Gonzalez, L., Gonzalez-Baeza, A., ... & Sanchez-Conde, M. (2024). HIV-infected Latin American asylum seekers in Madrid, Spain, 2022: A prospective cohort study from a major gateway in Europe. *Eurosurveillance*, 29(29), 2300692.

Disparities in the type of ART prescribed also persist despite the widespread adoption of newer treatments. Most high-income countries have adopted integrase strand transfer inhibitors (INSTIs) as the preferred first-line therapy due to their superior efficacy, tolerability, and low risk of resistance.⁸³ However, access to these regimens is not equitable across all populations. In France, for example, migrants are more likely to be prescribed older protease inhibitor-based regimens and are less likely to receive single tablet formulations, which simplify adherence and reduce long-term toxicity.⁸⁴ These inequities in prescribing patterns not only undermine patient adherence but also limit the potential for durable viral suppression. In Italy, the continued use of outdated national treatment guidelines, last meaningfully updated in 2017, restricts the systematic use of newer therapies.⁸⁵ Ensuring all populations benefit from the full range of innovative ART options requires addressing both clinical practice patterns and broader systemic barriers.

Root causes

A range of individual, social, and health system factors underlie these inequities in ART treatment. At the individual level, knowledge gaps regarding HIV therapy intersect with low perceived HIV exposure, especially among non-GBM populations. Economic hardship, unstable housing, or limited language proficiency can impede regular clinical visits and prescription refills.⁸⁶ A French study found that low income and non-homeownership carry a 190% higher risk of virological non-suppression.⁸⁷ At a social-level, stigma linked to HIV can discourage disclosure to healthcare providers or deter follow-up appointments, while fear of deportation can prevent many undocumented migrants from seeking timely treatment in the first place.⁸⁸

⁸³ Zhao, A. V., Crutchley, R. D., Guduru, R. C., Ton, K., Lam, T., & Min, A. C. (2022). A clinical review of HIV integrase strand transfer inhibitors (INSTIs) for the prevention and treatment of HIV-1 infection. *Retrovirology*, 19(1), 22.

⁸⁴ Palich, R., Hentzien, M., Hocqueloux, L., Duvivier, C., Allavena, C., Huleux, T., ... & Dat'AIDS Study Group. (2023). Country of birth is associated with discrepancies in the prescription of two-drug regimens in successfully treated people with HIV in France. *AIDS*, 37(12), 1891-1896.; Palich, R., Hentzien, M., Hocqueloux, L., Duvivier, C., Allavena, C., Huleux, T., ... & Cuzin, L. (2023). Country of birth is associated with antiretroviral therapy choice in treatment-naïve persons with HIV in France. *AIDS*, 37(9), 1459-1466.; Palich, R., Agher, R., Wetschikoy, D. J., Cuzin, L., Seang, S., Soulie, C., ... & Katlama, C. (2023). Birth country influences the choice of antiretroviral therapy in HIV-infected individuals: experience from a French HIV centre. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 92(2), 144-152.

⁸⁵ Galli, M., Borderi, M., & Viale, P. (2020). HIV policy in Italy and recommendations across the HIV care continuum. *Le infezioni in medicina*, 28(1), 17-28.

⁸⁶ Raho-Moussa, M., Guiguet, M., Michaud, C., Honoré, P., Palacios, C., Boué, F., ... & Abgrall, S. (2019). Respective roles of migration and social deprivation for virological non-suppression in HIV-infected adults on antiretroviral therapy in France. *PloS one*, 14(3), e0213019.; Goupil de Bouillé, J., Collignon, M., Capsec, J., Guillon, L., Le Moal, G., Barin, F., ... & Gras, G. (2021). Low-level HIV viremia is associated with low antiretroviral prescription refill rates and social deprivation. *AIDS care*, 33(11), 1445-1450.; Gunaratnam, P., McManus, H., Watchirs-Smith, L., McGregor, S., Callander, D., Brown, G., ... & ACCESS Steering Committee. (2018). People Born in Non-main English-Speaking Countries Are Less Likely to Start HIV Treatment Early in Australia: A National Cohort Analysis, 2014–15. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 77(3), e31-e34.

⁸⁷ Raho-Moussa, M., Guiguet, M., Michaud, C., Honoré, P., Palacios, C., Boué, F., ... & Abgrall, S. (2019). Respective roles of migration and social deprivation for virological non-suppression in HIV-infected adults on antiretroviral therapy in France. *PloS one*, 14(3), e0213019.

⁸⁸ Lagi, F., Gatteschi, C., Tilli, M., Zocco, N., Avarello, A., Bellini, S., ... & Ierardi, F. (2024). Facilitators and barriers in HIV testing and continuum of care among migrant transgender women who are sex workers residing in Florence, Italy. *International Journal of Transgender Health*, 25(2), 268-282.; Kamenshchikova, A., Peters, C. M., Nöstlinger, C., Rice, B., Ford, N., Ravasi, G., ... & Hargreaves, S. (2024). Interventions to ensure access to and continuity of HIV care for international migrants: an evidence synthesis. *The Lancet HIV*, 11(12), e873-e884.; Inoue, Y., Oka, S., Yokoyama, S., Hasegawa, K., Mahlich, J., Schaede, U., Habuka, N., & Murata, Y. (2023). Medication adherence of people living with HIV in Japan—A cross-sectional study. *Healthcare*, 11(4), 451. <https://doi.org/10.3390/healthcare11040451>.

Whilst structural barriers are the most influential, numerous healthcare systems restrict ART prescribing to hospital-based clinicians or specialised pharmacies, complicating access for individuals in rural regions or those lacking dependable transportation.⁸⁹ Legal and economic hurdles, such as residency status requirements or high co-pays, further deter early therapy initiation.⁹⁰

Although most high-income countries formally guarantee ART access, disparities persist in out-of-pocket costs and reimbursement structures. Canada provides full ART coverage under provincial health plans, but co-pays and deductibles vary, leading to inequities in treatment affordability.⁹¹ Japan's national insurance system also covers ART, but individuals with CD4 counts below 500 cells/mm³ are used to determine eligibility for supplementary financial protections, particularly disability certification that reduces out-of-pocket costs.⁹² As a result, individuals diagnosed and treated earlier may face higher out-of-pocket expenses, despite ART coverage, which runs counter to WHO and UNAIDS recommendations to provide treatment independent of disease stage. Overcoming these obstacles requires investments in patient-centred models, streamlined referral processes, and robust safety nets capable of serving mobile or underserved populations.

Persistent disparities in ART access, uptake, and prescribing practices are driven by a combination of individual, social, and structural barriers that disproportionately affect migrants, women, Indigenous populations, and other key groups. At the individual level, limited health literacy, unstable housing, and competing life priorities can hinder consistent treatment. Socially, stigma, discrimination, and fear of legal repercussions, especially among undocumented individuals, deter engagement in care. Structurally, fragmented service delivery, outdated clinical guidelines, restrictive insurance policies, and inequitable prescribing practices limit the reach and effectiveness of ART programmes. Recognising how these interconnected factors shape treatment outcomes is essential to addressing inequities and improving long-term viral suppression across all populations.

2.5 Adherence and retention

Evidence on extent of inequities

Gaps in adherence, retention in care, and sustained viral suppression persist across diverse settings and populations, undermining the long-term effectiveness of HIV treatment efforts. While global ART access has improved, disparities remain in who successfully maintains treatment and achieves viral suppression over time. These outcomes are closely tied to the strength and continuity of care

⁸⁹ ECDC. (2024). Pre-exposure prophylaxis for HIV prevention in Europe and Central Asia – Monitoring implementation of the Dublin Declaration on Partnership to fight HIV/AIDS in Europe and Central Asia: 2023 progress report.

⁹⁰ Australian Government. (2023). HIV Taskforce Report. <https://www.health.gov.au/sites/default/files/2024-07/hiv-taskforce-report.pdf>; Kinoshita, M., & Oka, S. (2018). Migrant patients living with HIV/AIDS in Japan: Review of factors associated with high dropout rate in a leading medical institution in Japan. PLoS ONE, 13(10), Article e0205184. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6195273/>; Sawada, T., Yamamoto, Y., Tsukada, N., Yokomaku, N., Iwamuro, S., Tarui, M., & Nakao, Y. (2020). 日本における HIV 陽性外国人の受療を阻害する要因に関する研究 [Factors inhibiting healthcare access among HIV-positive foreign residents in Japan]. Japanese Journal of AIDS Research, 22, 172–181. <https://jaids.jp/pdf/2020/20202203/20202203172181.pdf>

⁹¹ Government of Canada. (2024). Canada's progress towards ending the HIV epidemic, 2022.

⁹² Mizushima, D., Gatanaga, H., & Oka, S. (2024). Advances in HIV management and challenges in Japan: Current situation of pre-exposure prophylaxis in Tokyo, Japan. Global Health & Medicine. <https://doi.org/10.35772/ghm.2024.01043>

systems, as well as the ability of individuals, particularly those facing structural barriers, to consistently engage with them.

Retention in care is a key determinant of long-term viral suppression. Research from Italy shows that migrants from sub-Saharan Africa, Latin America, and Eastern Europe are nearly twice as likely to be lost to care, defined as not having an HCP visit or lab in 12 months.⁹³ Spain reports sub-optimal retention for PWID and signs of care disruption among newly arrived asylum seekers before they reestablish ART.⁹⁴ Without stable retention, individuals' viral loads risk rebounding, amplifying the danger of onward transmission, and jeopardising individual health outcomes.

These disruptions in care are reflected in population-level disparities in sustained viral suppression. In France, gaps in sustained viral suppression, measured in person-time from 2013–2017, were notable among women (65%), MSW (64%), and migrants (63%), with young migrant men faring worst (53% MSW, 58% GBM), compared to higher rates among GBM (73%) and French natives (75%).⁹⁵ Further, the risk of virologic rebound over a five-year period appears notably higher among migrant groups: one study found rates up to 34% among non-French Western immigrants, compared to 15% among French natives.⁹⁶ In Italy, migrants experience similarly high rates of virologic failure, particularly among African-born individuals, who face a fourfold higher risk.⁹⁷ Canada also shows pronounced viral suppression gaps: while urban GBM often surpass 90% viral suppression, Indigenous, PWID, and certain Black communities record substantially lower rates, sometimes below 70%.⁹⁸ And in Spain, PWID and Latin American migrants have historically lagged in achieving durable viral suppression.⁹⁹ Taken together, these patterns highlight not just who is falling behind in treatment outcomes, but also raise critical questions about why.

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- ⁹³ Prinapori, R., Giannini, B., Riccardi, N., Bovis, F., Giacomini, M., Setti, M., ... & Di Biagio, A. (2018). Predictors of retention in care in HIV-infected patients in a large hospital cohort in Italy. *Epidemiology & Infection*, 146(5), 606–611.; d'Arminio Monforte, A., Tavelli, A., Cozzi-Lepri, A., Castagna, A., Passerini, S., Francisci, D., ... & Antinori, A. (2020). Virological response and retention in care according to time of starting ART in Italy: data from the Icona Foundation Study cohort. *Journal of Antimicrobial Chemotherapy*, 75(3), 681–689.; Gazzola, L., Nardo, R., Tavelli, A., Maschi, A., Bini, T., & Marchetti, G. C. (2024). TD-5 Rapid ART initiation and Retention in care of people living with HIV: a six-years observational study in foreigners versus Italian-borne.
- ⁹⁴ Ryan, P., Manzano, S., Deihim-Rahampour, N., Cuevas, G., Martin-Gonzalez, L., Gonzalez-Baeza, A., ... & Sanchez-Conde, M. (2024). HIV-infected Latin American asylum seekers in Madrid, Spain, 2022: A prospective cohort study from a major gateway in Europe. *Eurosurveillance*, 29(29), 2300692.; Ryan, P., Valencia, J., Cuevas, G., Troya, J., Torres-Macho, J., Muñoz-Gómez, M. J., ... & Resino, S. (2021). HIV screening and retention in care in people who use drugs in Madrid, Spain: a prospective study. *Infectious Diseases of Poverty*, 10(04), 77–85.
- ⁹⁵ Cuzin, L., Allavena, C., Cotte, L., Delpierre, C., Huleux, T., Palich, R., ... & Cabié, A. (2021). No barrier to care, yet disparities in the HIV care continuum in France: a nationwide population study. *Journal of Antimicrobial Chemotherapy*, 76(6), 1573–1579.
- ⁹⁶ Abgrall, S., Selinger-Leneman, H., Lanoy, E., Becker, A., Matheron, S., de Truchis, P., ... & ANRS CO4-FHDH. (2024). Viral rebound on antiretroviral therapy in France according to region of origin, sex, and HIV acquisition group. Results from the French Hospital Database on HIV (ANRS CO4-FHDH). *HIV medicine*.
- ⁹⁷ Lagi, F., Kiros, S. T., Di Giambenedetto, S., Lombardi, F., Pecorari, M., Borghi, V., ... & Sterrantino, G. (2021). Long-term maintenance of virologic suppression in native and migrant HIV-1 naïve patients: an Italian cohort study. *AIDS care*, 33(9), 1159–1166.
- ⁹⁸ Government of Canada. (2024). Canada's progress towards ending the HIV epidemic, 2022.
- ⁹⁹ Ryan, P., Manzano, S., Deihim-Rahampour, N., Cuevas, G., Martin-Gonzalez, L., Gonzalez-Baeza, A., ... & Sanchez-Conde, M. (2024). HIV-infected Latin American asylum seekers in Madrid, Spain, 2022: A prospective cohort study from a major gateway in Europe. *Eurosurveillance*, 29(29), 2300692.; Ryan, P., Valencia, J., Cuevas, G., Troya, J., Torres-Macho, J., Muñoz-Gómez, M. J., ... & Resino, S. (2021). HIV screening and retention in care in people who use drugs in Madrid, Spain: a prospective study. *Infectious Diseases of Poverty*, 10(04), 77–85.

Root causes

Adherence difficulties often stem from a combination of individual, social, and structural barriers. Unstable housing, mental health issues, and substance use can make it challenging for PWID or those living in poverty to maintain medication schedules or follow up for lab tests.¹⁰⁰ Financial burdens, such as co-pays for ART or transportation, further impede continuity, particularly in settings with limited coverage.¹⁰¹ Stigma, both HIV-related and tied to immigration or social status, further erodes the ability to stay engaged in care, particularly for women and migrant populations who may already lack robust support networks.¹⁰²

The use of potent, well-tolerated first-line ART regimens with a high barrier to resistance has been critical in preventing the emergence of drug resistance. Rapid initiation of ART further reduces the risk of virological failure and resistance, which can otherwise compromise treatment efficacy and lead to more complex, costly interventions, as well as higher rates of infection, morbidity, and mortality. Looking ahead, it is essential to continue supporting first-line regimens that enable rapid initiation and offer strong resistance protection. Equally important is the adoption of novel treatment options that improve adherence or are more forgiving of missed doses. Policymakers must ensure equal and open access to these therapies to preserve long-term treatment effectiveness and protect public health.

From a structural standpoint, limited provider training and outdated guidelines can hinder effective viral load monitoring and timely interventions when adherence problems arise.¹⁰³ Rigid or biased prescribing may sometimes deny patients simpler, once-daily regimens or two-drug maintenance options that could improve adherence. Healthcare providers may disproportionately prescribe less optimal regimens to certain groups due to assumptions about adherence or other factors, ultimately

¹⁰⁰ Raho-Moussa, M., Guiguet, M., Michaud, C., Honoré, P., Palacios, C., Boué, F., ... & Abgrall, S. (2019). Respective roles of migration and social deprivation for virological non-suppression in HIV-infected adults on antiretroviral therapy in France. *PloS one*, 14(3), e0213019.; Goupil de Bouillé, J., Collignon, M., Capsec, J., Guillon, L., Le Moal, G., Barin, F., ... & Gras, G. (2021). Low-level HIV viremia is associated with low antiretroviral prescription refill rates and social deprivation. *AIDS care*, 33(11), 1445-1450.; Mussini, C., Lorenzini, P., Cozzi-Lepri, A., Mammone, A., Guaraldi, G., Marchetti, G., ... & Girardi, E. (2021). Determinants of loss to care and risk of clinical progression in PLWH who are re-engaged in care after a temporary loss. *Scientific Reports*, 11(1), 9632.; Ryan, P., Valencia, J., Cuevas, G., Troya, J., Torres-Macho, J., Muñoz-Gómez, M. J., ... & Resino, S. (2021). HIV screening and retention in care in people who use drugs in Madrid, Spain: a prospective study. *Infectious Diseases of Poverty*, 10(04), 77-85.

¹⁰¹ Government of Canada. (2024). Canada's progress towards ending the HIV epidemic, 2022.; Australian Government. (2023). HIV Taskforce Report. <https://www.health.gov.au/sites/default/files/2024-07/hiv-taskforce-report.pdf>.; Kinoshita, M., & Oka, S. (2018). Migrant patients living with HIV/AIDS in Japan: Review of factors associated with high dropout rate in a leading medical institution in Japan. *PLoS ONE*, 13(10), e0205184. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6195273/>.

¹⁰² Lagi, F., Gatteschi, C., Tilli, M., Zocco, N., Avarello, A., Bellini, S., ... & Ierardi, F. (2024). Facilitators and barriers in HIV testing and continuum of care among migrant transgender women who are sex workers residing in Florence, Italy. *International Journal of Transgender Health*, 25(2), 268-282.; Kamenshchikova, A., Peters, C. M., Nöstlinger, C., Rice, B., Ford, N., Ravasi, G., ... & Hargreaves, S. (2024). Interventions to ensure access to and continuity of HIV care for international migrants: an evidence synthesis. *The Lancet HIV*, 11(12), e873-e884.; Inoue, Y., Oka, S., Yokoyama, S., Hasegawa, K., Mahlich, J., Schaede, U., Habuka, N., & Murata, Y. (2023). Medication adherence of people living with HIV in Japan—A cross-sectional study. *Healthcare*, 11(4), 451. <https://www.mdpi.com/2227-9032/11/4/451>.

¹⁰³ Galli, M., Borderi, M., & Viale, P. (2020). HIV policy in Italy and recommendations across the HIV care continuum. *Le infezioni in medicina*, 28(1), 17-28.

reinforcing the very disparities they aim to circumvent.¹⁰⁴ By targeting these structural and social barriers, countries can bolster consistent engagement in care and help all PLWH achieve durable viral suppression.

Despite expanded access to ART, wide disparities remain in who can stay in care and achieve sustained viral suppression. Migrants, women, PWID, racial and ethnic minorities, and those facing socioeconomic disadvantage are disproportionately affected by poor retention and higher rates of virologic failure. These inequities reflect a combination of structural shortcomings and individual-level challenges, including stigma, housing instability, financial barriers, and biased prescribing, that must be addressed to ensure durable treatment success for all people living with HIV.

¹⁰⁴ Palich, R., Hentzien, M., Hocqueloux, L., Duvivier, C., Allavena, C., Huleux, T., ... & Dat'AIDS Study Group. (2023). Country of birth is associated with discrepancies in the prescription of two-drug regimens in successfully treated people with HIV in France. *AIDS*, 37(12), 1891-1896.; Palich, R., Hentzien, M., Hocqueloux, L., Duvivier, C., Allavena, C., Huleux, T., ... & Cuzin, L. (2023). Country of birth is associated with antiretroviral therapy choice in treatment-naïve persons with HIV in France. *AIDS*, 37(9), 1459-1466.; Palich, R., Agher, R., Wetshikoy, D. J., Cuzin, L., Seang, S., Soulie, C., ... & Katlama, C. (2023). Birth country influences the choice of antiretroviral therapy in HIV-infected individuals: experience from a French HIV centre. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 92(2), 144-152.

3. Policy progress and best practices

To understand the extent to which health inequities across communities have been prioritised in different countries, we first looked through national HIV plans and then considered the different policies that have been introduced to reduce inequities in prevention, testing and diagnosis, treatment and adherence, and retention.

3.1 The extent inequities are prioritised in national plans

Effective HIV responses rely not only on individual interventions, but on how well those interventions are connected, ensuring that testing leads to timely linkage to PrEP or treatment, and that individuals are supported throughout the care continuum. Fragmentation across these stages can lead to missed opportunities, particularly for populations already facing barriers to access. National HIV strategies can play a critical role in addressing this by establishing systems that promote coordination across prevention, testing, diagnosis, treatment, and long-term care. When well-designed, and where treatment decisions are based on person centred care, which put the needs of those with HIV or elevated HIV exposure and their complex lives as central in decision making, these strategies create alignment across local and regional actors, helping to operationalise equity goals and sustain improvements in access and outcomes. However, the existence of a national plan alone is not sufficient; particularly in countries with decentralised health systems, progress depends on the adoption of measurable, outcomes-based indicators that can drive accountability across regions.

Different countries have adopted varied approaches to HIV policy, with strategies ranging from national strategies to more regionalised models.¹⁰⁵ We examined national strategies in France, Germany, Spain, and Australia, which align with UNAIDS 95-95-95 targets and integrate HIV into broader sexual health initiatives.¹⁰⁶ In the UK, the devolved health landscape means that England, Scotland, and Wales have each developed their own national HIV action plans in the absence of a UK-wide strategy.¹⁰⁷ Other countries adopt a more regionalised approach, with national frameworks providing guidance for decentralised policy implementation. Canada has published a non-binding national framework to guide provincial health authorities in developing their own strategies.¹⁰⁸ In Japan, the Ministry of Health, Labour and Welfare periodically issues high-level HIV/AIDS Prevention Guidelines, though these are non-binding and less prescriptive than the dedicated strategies adopted in other countries studied.¹⁰⁹ In other countries, national plans play an even smaller role. Italy has developed a new National HIV Plan that is currently awaiting final approval, with dedicated funding of €5 million for implementation and an additional €1 million for PrEP; however, the previous 2017–2019

¹⁰⁵ World Health Organization. (2023). HIV policy adoption and implementation status in countries, 2023. <https://www.who.int/publications/i/item/9789240077242>.

¹⁰⁶ Ministère des solidarités et de la santé. (2021). National strategic roadmap for sexual health 2021-2024.; Australian Government. (2024). Ninth National HIV Strategy.; Federal Ministry for Economic Cooperation and Development. (2016). Integrated Strategy for HIV, Hepatitis B and C and Other Sexually Transmitted Infections.; Ministerio de Sanidad. (2021). Strategic Plan for the Prevention and Control of HIV and other Sexually Transmitted Infections in Spain 2021-2030.

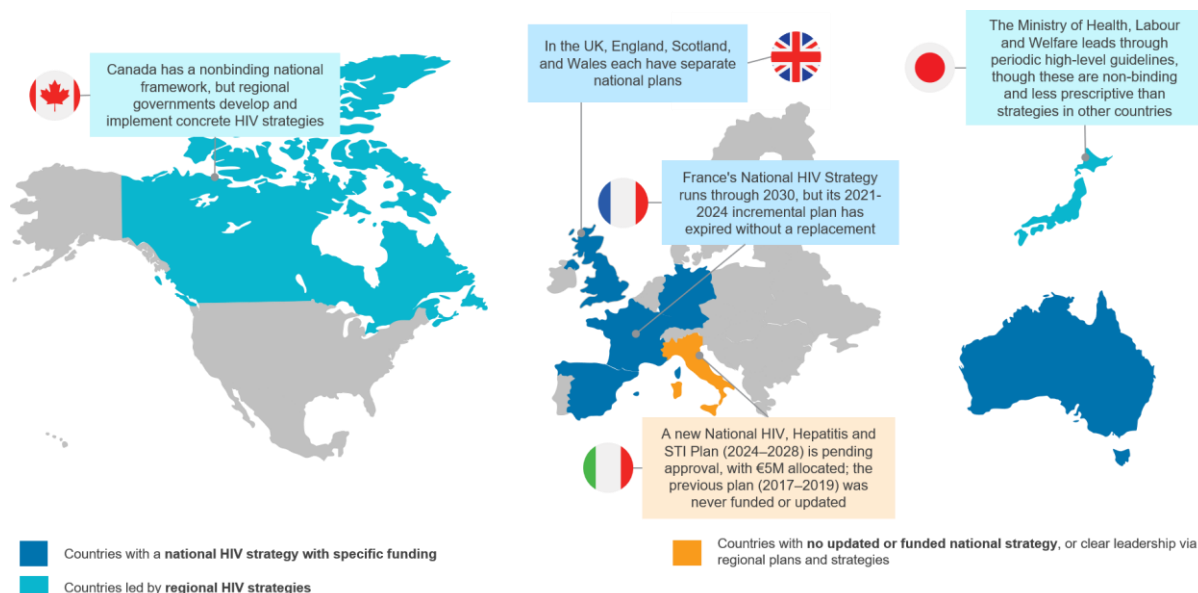
¹⁰⁷ Government of UK. (2020). Towards Zero - An action plan towards ending HIV transmission, AIDS and HIV-related deaths in England - 2022 to 2025.; Scottish Government. (2024). Ending HIV Transmission in Scotland by 2030: HIV Transmission Elimination Delivery Plan 2023-26.; Welsh Government. (2023). HIV Action Plan for Wales 2023-2026.

¹⁰⁸ Government of Canada. (2018). Reducing the health impact of sexually transmitted and blood-borne infections in Canada by 2030: A pan-Canadian STBBI framework for action.

¹⁰⁹ Ministry of Health, Labour and Welfare. (2025). Guidelines for the prevention of specific infectious diseases: HIV/AIDS (In Japanese).

plan was never updated or fully funded, leaving a prolonged gap in national strategic direction.¹¹⁰ An overview of the status of HIV policy and the extent they consider equitable access to HIV treatment and care is shown in Figure 2.

Figure 2: Overview of HIV strategies across countries



Source: CRA analysis

Across national HIV strategies, coverage of key populations varies widely in emphasis and specificity. GBM remain the most consistently prioritised group, with nearly all countries including targeted prevention, testing, and treatment efforts.¹¹¹ Migrants are receiving growing attention, reflecting their rising share of new diagnoses and the structural barriers they face in accessing care. Canada and Australia explicitly prioritise Indigenous populations, emphasising Indigenous leadership in policy implementation. PWID and sex workers are included through longstanding harm reduction programmes, though prioritization varies. Heterosexual men and women receive less explicit policy focus apart from maternal health programmes and are expected to benefit from broad population-wide efforts. Transgender people, those experiencing homelessness or incarceration, and individuals engaged in activities associated with higher HIV exposure are inconsistently addressed across national plans.

The inclusion of inequity has increased since the *2021-2026 UNAIDS Strategy to End Inequalities, End AIDS*. While policy efforts have improved access to HIV treatment and care, this is not consistent and significant gaps remain. Here we look at each of the areas identified in the last chapter and if there are specific policy solutions and best practices in addressing these disparities, highlighting successful policies and programmes, and identifying areas where further progress is needed.

¹¹⁰ Ministero della Salute. (2025). Bozza del Piano Nazionale di Interventi per la prevenzione delle infezioni da HIV, delle epatiti virali e delle infezioni sessualmente trasmesse (IST) 2024–2028. Trasmesso alla Conferenza Stato-Regioni, aprile 2025.; Castagna, A. (2025, July 21). HIV: over two thousand new infections, we need an alliance for testing and against stigma. *Il Sole 24 Ore*. <https://en.ilsole24ore.com/art/hiv-over-two-thousand-new-infections-need-an-alliance-testing-and-against-stigma-AHO8NKpB>; Galli, M., Borderi, M., & Viale, P. (2020). HIV policy in Italy and recommendations across the HIV care continuum. *Le infezioni in medicina*, 28(1), 17-28.

¹¹¹ European Centre for Disease Prevention and Control. (2021). Monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2020 progress report. <https://www.ecdc.europa.eu/en/publications-data/monitoring-implementation-dublin-declaration-2020-progress-report>

3.2 Prevention

Contemporary HIV prevention strategies increasingly follow the combination HIV prevention model recommended by UNAIDS, which calls for integrating evidence-based behavioural, biomedical, and structural interventions.¹¹² This approach maximises impact by tailoring strategies to local epidemic contexts and addressing the multifaceted barriers individuals face in accessing and benefiting from HIV prevention. Importantly, it recognises that preventing HIV is not solely a matter of individual behaviour, but also of structural access, stigma, affordability, and provider engagement.

Much of the recent focus on HIV prevention has been the approval and reimbursement of PrEP, which has significantly increased its availability and uptake. Most regulatory bodies and HTA agencies have a positive recommendation for PrEP, the latest regulator being Japan in August 2024.¹¹³ The rate of access to PrEP depends on the reimbursement of PrEP. Countries like the UK, France, Germany, Spain, and Australia with the highest number of annual PrEP users have free or heavily subsidised PrEP for eligible populations. In Canada, PrEP uptake was higher in British Columbia where it was free compared to in Ontario and Montreal where it was partially reimbursed.¹¹⁴ In Italy, the decision to fully reimburse PrEP in 2023 led to 12 new health centres expanding the capability to provide access, leading to 4,276 new users.¹¹⁵ Removing cost barriers ensures that PrEP reaches those most in need, particularly lower-income populations who might otherwise face financial constraints.

Policies to broaden PrEP prescribing authorities and locations can make it easier to access for key populations. Some countries like France allow general practitioners to prescribe PrEP, improving access, while others restrict it to specialised clinics or sexual health services, limiting availability.¹¹⁶ Nurses can prescribe PrEP in the UK, but not in most of Europe. Pharmacists are unable to initiate PrEP in Australia, Canada, Japan, or any EU countries in scope, limiting options for decentralised access.¹¹⁷ Healthcare provider education campaigns are critical for expanding access, ensuring that more physicians, nurses, and community health workers are equipped to recommend and manage PrEP for diverse patient populations. By strengthening provider engagement, enhancing public awareness, and addressing structural barriers, countries can close remaining prevention gaps and continue reducing new HIV infections.

In parallel, innovations in PrEP delivery, including the introduction of long-acting injectable PrEP, hold significant promise for improving adherence and expanding reach to populations who face barriers to daily pill use. Long-acting PrEP is now recommended by the World Health Organization, reflecting its

¹¹² Joint United Nations Programme on HIV/AIDS (UNAIDS). (2010). Combination HIV prevention: Tailoring and coordinating biomedical, behavioural and structural strategies to reduce new HIV infections (UNAIDS Discussion Paper). https://www.unaids.org/en/resources/documents/2010/20101006_JC2007_Combination_Prevention_paper

¹¹³ NAVLIN. (2024). Japanese Council Approves Truvada, Offers no Health Coverage. <https://www.navlindaily.com/article/20515/japanese-council-approves-truvada-offers-no-health-coverage>

¹¹⁴ Sang, J. M., McAllister, K., Wang, L., Barath, J., Lal, A., Parlette, A., ... & Lachowsky, N. J. (2022). Examining provincial PrEP coverage and characterizing PrEP awareness and use among gay, bisexual and other men who have sex with men in Vancouver, Toronto and Montreal, 2017–2020. *Journal of the International AIDS Society*, 25(10), e26017.

¹¹⁵ Nozza, S., Mazzotta, V., Masoero, T., Tavelli, A., Leserri, F., Taramasso, L., ... & Antinori, A. (2024). OC-50 Implementation of PrEP in Italy: results of PrIDE survey.

¹¹⁶ Gilles, M., Tetart, M., Huleux, T., Thill, P., Meybeck, A., & Robineau, O. (2023). HIV pre-exposure prophylaxis (PrEP) knowledge among general practitioners in 2020: A French survey. *Infectious Diseases Now*, 53(3), 104649.

¹¹⁷ Pharmacists can prescribe PrEP in Bulgaria, Malta, and Serbia. Source: ECDC. (2025). Pre-exposure prophylaxis for HIV prevention in Europe and Central Asia – Monitoring implementation of the Dublin Declaration on Partnership to fight HIV/AIDS in Europe and Central Asia: 2024 progress report (2023 data). <https://www.ecdc.europa.eu/en/publications-data/pre-exposure-prophylaxis-hiv-prevention-europe-and-central-asia-monitoring>.

superior efficacy and potential to reach individuals who may not benefit from daily oral PrEP, while reducing stigma, improving convenience, and supporting sustained engagement with prevention to help close persistent equity gaps.¹¹⁸

Behavioural interventions remain a cornerstone of HIV prevention strategies. These include promoting condom use, safe sex education, and comprehensive HIV risk education. Many countries have incorporated harm reduction efforts into their national and regional policies, providing services such as needle exchange programmes and supervised injection sites to reduce the risk of HIV transmission among PWID, and targeted education programmes for sex workers. Countries have increasingly adopted targeted community outreach programmes that raise awareness of HIV risk and reduce stigma, particularly among populations with high prevalence. Recent programmes have also incorporated PrEP awareness and education to drive uptake. In Australia, programmes like Emen8 have been particularly successful in promoting PrEP uptake among GBM and Indigenous populations through culturally tailored education and community engagement.¹¹⁹ Dedicated Aboriginal and Torres Strait Islander sexual health worker roles within communities have also helped ensure prevention services are culturally safe and locally relevant.¹²⁰ In Canada, Indigenous-led programmes such as Chee Mamuk train community members to deliver HIV and sexual health education in culturally grounded settings.¹²¹ The UK has launched mobile PrEP programmes to increase uptake among PWID and homeless individuals.¹²² In Japan, since 2021, multilingual tools for PrEP access have been tested in select clinics enhancing outreach to foreign populations.¹²³ These programmes address specific cultural, linguistic, and socioeconomic needs, ensuring that information is accessible and relevant to diverse communities.

Policy advancements in behavioural interventions, community outreach, PrEP reimbursement, and prescribing have strengthened HIV prevention efforts in high-income countries. Broad reimbursement, decentralised prescribing, delivery innovations such as long-acting PrEP, and culturally tailored outreach reduce cost, logistical, and cultural barriers, making prevention tools more accessible to key populations and helping close equity gaps in HIV prevention.

¹¹⁸ World Health Organization. (2022, July 28). WHO recommends long-acting cabotegravir for HIV prevention. World Health Organization.

¹¹⁹ Grulich, A. E., Guy, R., Amin, J., Jin, F., Selvey, C., Holden, J., ... & Parkhill, N. (2018). Population-level effectiveness of rapid, targeted, high-coverage roll-out of HIV pre-exposure prophylaxis in men who have sex with men: the EPIC-NSW prospective cohort study. *The Lancet HIV*, 5(11), e629-e637.; Australian Government. (2023). HIV Taskforce Report. <https://www.health.gov.au/sites/default/files/2024-07/hiv-taskforce-report.pdf>.

¹²⁰ Ward, J., Costello-Czok, M., Willis, J., Saunders, M., & Shannon, C. (2014). So far, so good: Maintenance of prevention is required to stem HIV incidence in Aboriginal and Torres Strait Islander communities in Australia. *AIDS education and prevention*, 26(3), 267-279.

¹²¹ BC Centre for Disease Control. (n.d.). Chee Mamuk. Retrieved June 10, 2026, from <https://www.bccdc.ca/our-services/programs/chee-mamuk>

¹²² Scottish Drugs Forum. (2021). People who are homeless and at risk of HIV supported with UK-first mobile PrEP initiative. <https://sdf.org.uk/people-who-are-homeless-and-at-risk-of-hiv-supported-with-uk-first-mobile-prep-initiative/>

¹²³ Kitajima, T., Sawada, T., Miyakubi, H., & Tran, T. H. (2022). Implementation of HIV testing sessions for foreign residents in Japan: A multilingual access model to improve HIV testing and care access [在留外国人を対象とした HIV 検査会の実施]. In FY2021 Research Report on AIDS Policy Studies funded by the Ministry of Health, Labour and Welfare (pp. 29–33). https://mhlw-grants.niph.go.jp/system/files/report_pdf/8_1%E5%A4%96%E5%9B%BD%E8%AA%9EHIV%E6%A4%9C%E6%9F%BB%E4%BC%9A.pdf

3.3 Testing and diagnosis

Effective HIV testing policies are essential for early diagnosis, treatment initiation, and prevention of further transmission. High-income countries have expanded routine screenings, rapid diagnostic tests, self-testing options, and community-based outreach to improve detection rates across key populations. These efforts have increased testing uptake, reduced late diagnoses, and strengthened linkage to care. Many countries have strengthened routine HIV screening recommendations to improve early diagnosis, particularly among populations with high prevalence. France and Australia recommend HIV testing every three months for GBM and annually for PWID and individuals from high-prevalence regions.¹²⁴ These policies align with clinical guidelines that emphasise repeat screening to reduce undiagnosed cases and late diagnoses. Although policies and guidelines recommend repeat testing, adoption in practice can vary.

Community-based HIV testing has expanded to improve access for the general population and target outreach to key populations. Several countries, including Germany, France, Japan, and the UK offer free, anonymous testing at community clinics and sexual health centres.¹²⁵ In the UK, free online postal testing services allow individuals to order HIV and STI test kits to their home, receive results digitally, and access NHS follow-up care, providing a discreet, low-barrier option that complements clinic-based services.¹²⁶ Italy's Community-Based Voluntary Counselling and Testing (CBVCT) network grew from 2 to 25 centres (2020–2023), significantly increasing testing capacity.¹²⁷ Australia's ACCESS network, established in 2013, integrates HIV/STI testing with real-time surveillance, offering free or low-cost care while tracking trends.¹²⁸ Australia also offers a national programme delivering free HIV self-testing kits by post, further reducing barriers to access.¹²⁹ In Canada, community-led organizations have received federal and some provincial support to distribute rapid tests and expand outreach to key populations.¹³⁰ In France, free HIV screening in all clinical pathology laboratories was introduced in 2022, building on a pilot programme ("Au labo sans ordo") in Paris and Nice that reached populations less likely to visit STI clinics or seek a prescribed test, particularly heterosexual

¹²⁴ Ministère des solidarités et de la santé. (2021). National strategic roadmap for sexual health 2021-2024.; Australian Government. (2024). Ninth National HIV Strategy. <https://www.health.gov.au/sites/default/files/2024-12/ninth-national-hiv-strategy-2024-2030.pdf>.

¹²⁵ Federal Ministry for Economic Cooperation and Development. (2016). Integrated Strategy for HIV, Hepatitis B and C and Other Sexually Transmitted Infections.; HAS. (2017). Réévaluation de la stratégie de dépistage de l'infection à VIH en France. p. 41.; Oto. (2024). Where To Get Tested for STDs in Tokyo. Tokyo Weekender. <https://www.tokyoweekender.com/japan-life/news-and-opinion/where-to-get-tested-for-stds-in-tokyo/>.; UK Health Security Agency. (2024). HIV testing, PrEP, new HIV diagnoses and care outcomes for people accessing HIV services: 2024 report.

¹²⁶ Gibbs, J., Stirrup, O., Tostevin, A., Howarth, A., Dewsnap, C., Ross, J. D., ... & Burns, F. (2026). Sexually transmitted infection testing and key outcomes following implementation of online postal self-sampling into sexual health services in England: a retrospective observational study of routinely collected service-level healthcare data. *The Lancet Regional Health–Europe*, 61.

¹²⁷ Cosmaro, L., Curridori, S., Penon, S., Cernuschi, M., Calzavara, D., Russo, P., ... & Mercurio, I. (2024). P-176 Testing for HIV in CBVCT services adhering to the COBATEST network–2020–2023.

¹²⁸ Australian Government. (2024). Ninth National HIV Strategy. <https://www.health.gov.au/sites/default/files/2024-12/ninth-national-hiv-strategy-2024-2030.pdf>

¹²⁹ MacGibbon, J., Newham, B., Cogle, A., & Holt, M. (2025). Australia's First Free National HIV Self-Testing Service: HIVtest. au Project Evaluation 2023-24.

¹³⁰ Public Health Agency of Canada. (2022). Government of Canada is making HIV testing more accessible across Canada.; Musten, A., & O'Byrne, P. (2024). HIV self-test use says a lot about our primary care system. *CCDR*, 50, 12.

men and individuals with limited health insurance.¹³¹ These initiatives have been instrumental in improving diagnosis rates among migrants, PWID, sex workers, and Indigenous populations, ensuring testing services reach populations disproportionately affected by HIV.

The expansion of self-testing and home-based screening has improved accessibility for people who face barriers to clinic-based testing. France, Spain, and the UK have approved and expanded access to self-testing kits by making them widely available in pharmacies.¹³² Canada approved its first HIV self-test in 2020, with subsequent investments supporting community distribution and outreach to key groups.¹³³ Germany and Spain have also scaled up rapid point-of-care testing (POCT) and decentralised screening, particularly for vulnerable populations.¹³⁴ While self-collection HIV testing has grown in Japan, increasing from 26,000 tests in 2005 to 91,000 in 2016, these tests are not yet officially approved or covered by health insurance, limiting their impact.¹³⁵

Emergency departments (EDs) play an increasingly important role in identifying undiagnosed HIV cases. Countries have adopted different models for integrating HIV testing in EDs, ranging from opt-in testing based on indicator conditions to broader opt-out testing in high-prevalence areas. In Spain, targeted opt-in HIV testing in 121 emergency departments, based on patients presenting with indicator conditions, led to 66,813 tests and 901 new diagnoses between 2021 and 2022, proving cost-effective (€20M investment vs. €4.41B in savings over 20 years).¹³⁶ Meanwhile, in the UK, opt-out HIV testing has been implemented in over 34 emergency departments in areas with high HIV prevalence, significantly increasing diagnoses.¹³⁷ The UK's approach ensures routine testing for all patients in these settings, while Spain's model focuses on identifying individuals with elevated exposure through clinical indicators. Both strategies have proven effective in detecting undiagnosed infections and linking individuals to care.

Opt-out HIV screening in primary care settings is emerging as an effective model for increasing testing rates and reducing late diagnoses in key populations. Spain has integrated opt-out HIV screening based on indicator conditions into routine primary care in Valencia, resulting in a 194%

¹³¹ Ministère des solidarités et de la santé. (2021). National strategic roadmap for sexual health 2021-2024.; Champenois, K., Sawras, V., Ngoh, P., Bouvet de la Maisonneuve, P., Valbousquet, J., Annequin, M., ... & ALSO group. (2024). Facilitating the access to HIV testing at lower costs: "To the laboratory without prescription" (ALSO), a pilot intervention to expand HIV testing through medical laboratories in France. *Plos one*, 19(10), e0309754.

¹³² HAS. (2017). Réévaluation de la stratégie de dépistage de l'infection à VIH en France. p. 41.; Ministerio de Sanidad. (2021). Strategic Plan for the Prevention and Control of HIV and other Sexually Transmitted Infections in Spain 2021-2030.; UK Health Security Agency. (2024). HIV testing, PrEP, new HIV diagnoses and care outcomes for people accessing HIV services: 2024 report.

¹³³ Public Health Agency of Canada. (2022). Government of Canada is making HIV testing more accessible across Canada.

¹³⁴ Ministerio de Sanidad. (2021). Strategic Plan for the Prevention and Control of HIV and other Sexually Transmitted Infections in Spain 2021-2030.; van Bremen, K., Monin, M., Schlabe, S., Bischoff, J., Rieke, G. J., Schwarze-Zander, C., ... & Boesecke, C. (2022). Impact of COVID-19 on HIV late diagnosis in a specialized German centre. *HIV medicine*, 23(11), 1209-1213.

¹³⁵ Kanamori, R., Umemura, F., Uemura, K., Miyagami, T., Valenti, S., Fukui, N., ... & Naito, T. (2024). Web-Based Search Volume for HIV Tests and HIV-Testing Preferences During the COVID-19 Pandemic in Japan: Infodemiology Study. *JMIR Formative Research*, 8, e52306.; Takano, M., et al. (2018). Assessment of HIV prevalence among MSM in Tokyo using self-collected dried blood spots delivered through the postal service. *BMC infectious diseases*, 18, 1-7.

¹³⁶ Ortega-Gonzalez, E., Martínez-Roma, M., Ocete, M. D., Jimeno, C., Fornos, A., Esteban, A., ... & Garcia-Deltoro, M. (2022). HIV screening and linkage to care in a health department in Valencia, Spain: Lessons learned from a healthcare quality improvement project. *Medicine*, 101(41), e30400.

¹³⁷ UK Health Security Agency. (2024). Public health evaluation of BBV opt-out testing in EDs in England: 24-month interim report.

increase in testing uptake and an 18.2% reduction in late diagnoses.¹³⁸ By normalising HIV testing within primary care visits, opt-out screening reduces stigma and increases the likelihood of early detection. As more countries explore this model, its potential to further close gaps in testing access and support earlier intervention continues to grow.

Technology-driven innovations are increasingly being leveraged to improve testing uptake and streamline HIV diagnosis. Automated reminders in emergency departments and primary care settings have enhanced screening compliance and early detection in Spain.¹³⁹ These advancements help ensure that key groups receive timely testing and care.

HIV testing in key populations has expanded through targeted policies, improving early diagnosis and reducing undiagnosed cases. Routine screening, along with free community-based and anonymous testing, has enhanced accessibility. Self-testing and rapid decentralised testing, including free postal services, have boosted uptake. Emergency department testing, including opt-in screening and opt-out in high-prevalence areas, has proven effective. Opt-out primary care screening has also increased early diagnoses. Technology-driven solutions, such as automated reminders, further improve compliance. Scaling up these best practices will strengthen early detection, reduce late diagnoses, and advance global HIV prevention goals.

3.4 Treatment

Ensuring rapid access to ART is essential for improving health outcomes and reducing HIV transmission. Many high-income countries have implemented universal ART policies, removing CD4 count restrictions and prioritising immediate treatment initiation following diagnosis. These policies align with global best practices that emphasise early treatment to achieve viral suppression and prevent further transmission. Many of these policies focus on universal access rather than targeting specific populations. However, without explicit attention to key populations, universal policies may fail to address persistent disparities in who initiates and stays on treatment.

Several countries have institutionalised universal ART access, ensuring all individuals diagnosed with HIV receive treatment regardless of residency status. France, the UK, Spain, and Italy provide fully reimbursed ART, including for migrants.¹⁴⁰ Germany provides fully reimbursed ART through statutory health insurance, though access for migrants can depend on residency status: individuals undergoing the asylum process initially fall under the Asylum Seekers' Benefits Act

¹³⁸ Ortega-Gonzalez, E., Martínez-Roma, M., Ocete, M. D., Jimeno, C., Fornos, A., Esteban, A., ... & Garcia-Deltoro, M. (2022). HIV screening and linkage to care in a health department in Valencia, Spain: Lessons learned from a healthcare quality improvement project. *Medicine*, 101(41), e30400.

¹³⁹ Hernández-Febles, M., Santana, M. Á. C., Monzón, R. G., Guerra, X. B., & López, M. J. P. (2024). Evaluation of a HIV screening strategy in the hospital setting to reduce undiagnosed infection. *Enfermedades infecciosas y microbiología clínica* (English ed.); Agustí, C., Cunillera, O., Almeda, J., Mascort, J., Carrillo, R., Olmos, C., ... & Casabona, J. (2022). Efficacy of an electronic reminder for HIV screening in primary healthcare based on indicator conditions in Catalonia (Spain). *HIV medicine*, 23(8), 868-879.

¹⁴⁰ Ministère des solidarités et de la santé. National strategic roadmap for sexual health 2021-2024.; Galli, M., Borderi, M., & Viale, P. (2020). HIV policy in Italy and recommendations across the HIV care continuum. *Le infezioni in medicina*, 28(1), 17-28.; Ministerio de Sanidad. (2021). Strategic Plan for the Prevention and Control of HIV and other Sexually Transmitted Infections in Spain 2021-2030.; ECDC. (2024). Midterm review of the implementation and impact of Germany's BIS 2030 strategy for the prevention and control of HIV, hepatitis B and C, and other STIs.; Government of UK. (2020). Towards Zero - An action plan towards ending HIV transmission, AIDS and HIV-related deaths in England - 2022 to 2025.

(Asylbewerberleistungsgesetz), which may limit access to comprehensive healthcare services.¹⁴¹ France has gone a step further and adopted a stopgap measure to provide undocumented migrants with ART after 3 months since arrival.¹⁴² Australia recently expanded ART coverage in 2023, offering free access to non-Medicare eligible individuals at government-funded hospitals, addressing previous gaps in care.

Many countries have implemented policies to ensure faster ART initiation following diagnosis, recognising the benefits of early treatment. France and Germany recommend immediate treatment initiation,¹⁴³ while Italy has widely adopted rapid ART initiation, despite limited quantitative data on implementation.¹⁴⁴ Spain has significantly improved linkage to care, with rates rising from 42% in 2005 to 80% in 2022, and viral suppression within three months increasing from 6% to 45%.¹⁴⁵ Same-day ART initiation is practiced in some settings, but immediate treatment may not always be appropriate for individuals depending on their health and psychosocial support needs. Ensuring a structured referral system and rapid reimbursement approvals is crucial to making immediate ART initiation sustainable and effective. Equity-sensitive implementation is key to ensuring these improvements benefit not only the general population but also key groups who face stigma, late diagnosis, or barriers to regular care.

Expanding universal ART coverage and streamlining rapid initiation policies are key strategies for improving treatment access and addressing inequities. Countries that eliminate coverage gaps and strengthen HIV care infrastructure will be better positioned to achieve equitable treatment access.

3.5 Adherence and retention

Achieving viral suppression relies not only on timely ART initiation but also on sustained adherence and long-term retention in care. As shown in Chapter 2, this varies considerable across different populations. Key groups facing social and structural barriers often experience lower rates of retention and adherence, contributing to disparities in viral suppression outcomes. However, policy prioritization in this area remains limited, as adherence strategies are largely driven by healthcare providers rather than national health policies.

Simplifying ART regimens is a critical step toward reducing disparities in adherence, particularly for individuals facing challenges with daily pill-taking due to stigma, unstable housing, or complex life circumstances. The adoption of single-tablet regimens has been a key development in supporting adherence, reducing pill burden, and improving ease of use.¹⁴⁶ While long-acting injectable ART has

¹⁴¹ Deutsche Aidshilfe. (n.d.). Medizinische Versorgung. Retrieved June 8, 2026, from <https://www.aidshilfe.de/de/medizinische-versorgung>.

¹⁴² Ministère des solidarités et de la santé. National strategic roadmap for sexual health 2021-2024.

¹⁴³ Ibid.; ECDC. (2024). Midterm review of the implementation and impact of Germany's BIS 2030 strategy for the prevention and control of HIV, hepatitis B and C, and other STIs.

¹⁴⁴ Galli, M., Borderi, M., & Viale, P. (2020). HIV policy in Italy and recommendations across the HIV care continuum. *Le infezioni in medicina*, 28(1), 17-28.

¹⁴⁵ Alejos, B., Díez, C., Galindo, M. J., López, J. C., Moreno-García, E., Estrada, V., ... & CoRIS. (2022). Progress in the quality of care for newly diagnosed people with HIV in Spain (2004–2019). *Antiviral Therapy*, 27(4), 13596535221112729.

¹⁴⁶ Papa, N., Cammarota, S., Citarella, A., Atripaldi, L., Bernardi, F. F., Fogliasecca, M., ... & Spatarella, M. (2021). Evolution in real-world therapeutic strategies for HIV treatment: A retrospective study in southern Italy, 2014–2020. *Journal of Clinical Medicine*, 11(1), 161.

been approved across the countries in scope, reimbursement and uptake remain limited in some settings and even so may not be appropriate or wanted by all patients.¹⁴⁷

Digital health solutions and telehealth services are emerging as powerful tools for addressing inequities in HIV care by expanding access, reducing geographic barriers, and supporting sustained engagement in treatment. Spain's national strategy integrates digital health tools and primary care coordination, streamlining ART prescription and follow-up care.¹⁴⁸ Australia's 2024 policy established permanent nationwide telehealth services for bloodborne viruses (BBVs) and sexual and reproductive health, reducing geographic barriers and improving continuity of care.¹⁴⁹ These solutions facilitate adherence and improve patient engagement in treatment. Importantly, they can also help close geographic and socioeconomic gaps in care, offering greater flexibility and access for populations that may struggle with traditional in-person models.

Beyond clinical interventions, broader support services play a critical role in sustaining engagement in care. Peer support programmes, in which people living with HIV support others through navigation, mentoring, and advocacy, have been associated with improved retention and re-engagement, particularly for people newly diagnosed or returning to care after a period of disengagement.¹⁵⁰ In Australia, peer navigators are recognised as critical to delivering person-centred care, while in the UK, centres that have embedded structured peer support into routine clinical pathways report marked improvements in engagement and retention.¹⁵¹ These models reflect a growing recognition that durable retention depends not only on accessible clinical services but on addressing the social and psychological factors, including housing instability, mental health, stigma, and discrimination, that drive disengagement.¹⁵²

Expanding access to HIV care through decentralised delivery models has emerged as a key strategy across many high-income countries to reduce disparities in treatment outcomes. By integrating HIV services into primary care, community clinics, and pharmacies, countries can improve reach, reduce stigma, and offer more convenient, person-centred care, especially for populations that face barriers in traditional or centralised health systems.

However, Japan's experience offers a valuable counterpoint, where a centralised network of 380 designated AIDS Core Hospitals has proven highly effective in delivering high-quality, specialised HIV care.¹⁵³ By 2021, nearly 28,000 people were receiving care at these hospitals, with ART continuation

¹⁴⁷ Australian Government. (2024). Ninth National HIV Strategy. <https://www.health.gov.au/sites/default/files/2024-12/ninth-national-hiv-strategy-2024-2030.pdf>.

¹⁴⁸ Ministerio de Sanidad. (2021). Strategic Plan for the Prevention and Control of HIV and other Sexually Transmitted Infections in Spain 2021-2030.

¹⁴⁹ Australian Government. (2024). Ninth National HIV Strategy. <https://www.health.gov.au/sites/default/files/2024-12/ninth-national-hiv-strategy-2024-2030.pdf>

¹⁵⁰ British HIV Association. (2025). Interim update: Standard 2b – Self-management and peer support. In BHIVA Standards of Care for People Living with HIV. <https://www.bhiva.org/clinical-standards/standards-of-care/>

¹⁵¹ ASHM. (2022). Australian Consensus Statement on Person-Centred HIV Care. <https://ashm.org.au/initiatives/australian-consensus-statement-on-person-centred-hiv-care/>; National AIDS Trust. (2025). No one left behind: Re-engaging the 12,000 people not in HIV care. <https://nat.org.uk/wp-content/uploads/2025/09/No-one-left-behind.pdf>.

¹⁵² Lazarus, J. V., Cascio, M., Anderson, J., Pasanen, S., & Harding, R. (2023). A person-centred approach to enhance the long-term health and wellbeing of people living with HIV in Europe. *Journal of the International AIDS Society*, 26(Suppl 1), e26117. <https://doi.org/10.1002/jia2.26117>

¹⁵³ Yokomaku, Y. (2023). Successful outcomes of antiretroviral therapy at the AIDS Core Hospitals in Japan [日本のエイズ治療の拠点病院における抗 HIV 療法の優れた治療成績]. *Journal of the National Institute of Public Health*, 72(2), 98–109. <https://www.niph.go.jp/journal/data/72-2/202372020004.pdf>.

and treatment success rates exceeding 95% and 99%, respectively. These hospitals offer comprehensive HIV care, including specialist support, regular monitoring, and adherence programmes, ensuring high-quality treatment for individuals with HIV. While most countries have shifted toward decentralization to increase equity and convenience, Japan's centralised approach has worked well in part due to its strong referral systems, regional coordination, and high levels of care standardization, allowing it to maintain strong treatment retention despite the absence of a formal national HIV strategy.

Strengthening adherence and retention strategies is essential to reducing inequities in long-term viral suppression and HIV transmission, including avoiding resistance. Decentralised care models, such as telehealth services, integration into primary care, and mobile health units, have proven especially effective in reaching underserved populations and improving engagement with treatment. These approaches reduce logistical and structural barriers, expand access beyond urban centres, and foster continuity of care in more flexible, community-based settings. Equally important are the broader support services, including peer support programmes and person-centred care models, that address the social and psychological factors driving disengagement from care. At the same time, centralised systems can also be effective when designed for consistency and comprehensive care, as demonstrated by Japan's network of AIDS Core Hospitals, which have achieved high rates of treatment continuation and viral suppression through specialist-driven, structured support. Countries should tailor retention and adherence efforts to local health system structures, combining clinical access with community-based support to enhance ART adherence, reducing disparities in viral suppression, and ensuring that people living with HIV receive sustained, high-quality care.

4. Policy opportunities and recommendations

Drawing on the policy progress and best practices described in Chapter 3, there are many levers available to enhance equitable access to HIV treatment and care across the entire continuum. Consistent with guidance from WHO and UNAIDS, a person-centred approach – one that responds to the diverse needs, preferences, and lived experiences of individuals – is essential to designing effective and equitable responses. In line with the UNAIDS Global AIDS Strategy 2026 to 2031, this also requires ensuring that HIV services are accessible, acceptable, high-quality, and free from stigma and discrimination, and are embedded within sustainable national health and community systems. We have considered this approach at all levels of analysis, recognising that the HIV response must go beyond biomedical solutions to account for structural, cultural, and social realities. Because many of these barriers, including migration, discrimination, and social exclusion, extend beyond health policy, effective responses will also require alignment across government ministries and policy domains. Addressing these disparities requires action at the individual, social, and health system levels, with strategies that expand culturally tailored education, reduce stigma, and improve healthcare accessibility. Table 2 outlines key policy interventions that can strengthen HIV responses across the patient journey, addressing the root causes of inequities across multiple levels to improve outcomes.

Table 2: Policy opportunities to address the root causes of inequities

Stage along HIV care cascade	Individual-level policy opportunities	Social-level policy opportunities	Health system-level policy opportunities
Prevention	- Expand culturally tailored education campaigns on PrEP targeting migrant (especially women) and Indigenous populations and those with unmet need - Provide counselling to improve risk perception and PrEP awareness	Develop robust, community-led outreach and awareness initiatives - Launch anti-stigma campaigns focusing on key populations Train providers on PrEP counselling to improve patient awareness and accessibility	Expand PrEP prescribing power to GPs and pharmacists, and increase support through telehealth and pharmacy models Broaden PrEP reimbursement eligibility to encompass all key populations and reduce or eliminate PrEP co-pays to increase access for uninsured and low-income individuals Integrate PrEP counselling into maternal and primary care
Testing, diagnosis and linkage to care (First 95)	- Run targeted campaigns for testing awareness among women, migrants, and key populations with high late-diagnosis rates Educate on routine testing to reduce fear and increase risk awareness	- Fund and guide community-led testing initiatives and partner with local stakeholders to optimise free testing access points and distribution programmes for rapid and self-tests - Improve multilingual support at public health centres - Add social and cultural mediators into multidisciplinary teams to ensure effective testing and strong care linkage	- Implement systematic ED HIV screening programmes, exploring opt-out in high-prevalence areas or opt-in based on indicator conditions where geographic concentration is less prominent - Adopt voluntary early settlement screening with repeat testing in migrant-dense areas Broaden HIV testing by integrating into primary care (e.g., based on indicator conditions) and expanding mobile units and telehealth Reimburse self-tests and repeat testing Link negative HIV test results to PrEP counselling and eligibility screening as part of standard testing protocols
Receiving ART (Second 95)	Provide financial assistance for ART co-payments to reduce cost barriers for individuals	- Increase GP and pharmacist education on ART prescribing following positive tests and culturally conscious care in countries where they can prescribe - Strengthen HCP guidance on culturally competent HIV counselling	Update national HIV treatment guidelines to align with WHO Expand ART reimbursement eligibility for migrants, uninsured populations, and to all PLWH irrespective of CD4 count - Standardise rapid ART initiation/referral practices Streamline reimbursement to avoid initiation delay and attrition Broaden ART prescribing power to GPs and pharmacists
Achieving Viral Suppression (Third 95)	- Address adherence barriers with personalised counselling and culturally tailored support Simplify treatment regimens, such as expanding single-dose ART Prescribing HIV treatment with a high barrier to resistance.	- Develop community-based adherence programmes, including peer support and patient navigation, focused on key populations - Expand peer navigation programmes to re-engage individuals in care and reduce stigma	Fund and expand retention and reinitiation programmes Strengthen data systems for monitoring viral rebound and attrition - Expand presence of specialised clinics in underserved regions - Leverage digital health innovations (e.g., remote adherence support, telemedicine) Integrate mental health support into ART retention programmes, especially for PWID and homeless populations

A comprehensive policy approach should strengthen HIV responses at every stage of the care cascade, from prevention and diagnosis to treatment and long-term viral suppression. Below we highlight key recommendations to improve access to innovations in HIV prevention and treatment.

By implementing these policy solutions holistically, countries can reduce disparities, improve retention in care, and enhance overall health outcomes for people living with HIV or with elevated HIV exposure. A comprehensive, multi-stakeholder approach will be key to achieving global HIV targets and ensuring equitable healthcare for all. Achieving this will require coordinated policy action to expand equitable access to ARV-based prevention and treatment, accelerate timely diagnosis and linkage to care, support durable viral suppression, strengthen community leadership, and remove legal and structural barriers. A necessary enabler to implementing these policy solutions is a comprehensive understanding of the extent of inequities across key populations. In some countries, current data indicates that the ART coverage rate and viral suppression rate are good; however, the lack of evidence and specific data collection for certain populations highlights a significant gap in data and intervention strategies. There is a need to develop better data collection systems, ensuring these monitor all populations groups of interest where health inequities may occur. While surveillance systems are improving, most countries still fail to consistently report HIV indicators disaggregated by key population, geography, and age. Tools like the ECDC database are helping to identify disparities across Europe, but greater investment in routine, disaggregated data is essential to ensure all groups are included in, and benefit from, HIV progress. Without it, equity-focused strategies risk falling short.

4.1 Individual-level policy solutions

Patient education and counselling

There is a need to expand culturally tailored PrEP education, counselling, and anti-stigma campaigns to improve self-perception of HIV risk, increase testing awareness, and address adherence barriers. Programmes that embed peer educators and community health workers within the populations they serve have proven effective in delivering prevention information in culturally grounded, trusted settings.¹⁵⁴ For HIV diagnosis, increasing awareness and normalising routine testing are critical to reducing late diagnoses and undiagnosed infections. Targeted public health messaging can encourage earlier testing among populations with high rates of late diagnosis.

4.2 Social-level policy solutions

Community-based programmes

Community-led initiatives and linguistically inclusive support can result in benefits across the care cascade. Expanding a range of community-led outreach programmes (e.g., education, testing distribution, peer support, patient navigation) can improve testing access, re-engage individuals in care, reduce stigma, and support ART adherence. Community outreach should be understood as a primary access point for many underserved populations, particularly those who face barriers to formal healthcare systems. Their effectiveness lies in the ability to meet individuals where they are, adapting support to the specific barriers each population faces.

¹⁵⁴ Berg, R. C., Page, S., & Øgård-Repål, A. (2021). The effectiveness of peer-support for people living with HIV: A systematic review and meta-analysis. *PLoS one*, 16(6), e0252623.

HCP training

Limited provider training can hinder effective viral load monitoring and timely interventions when adherence problems arise. Training providers on PrEP counselling to improve patient awareness, accessibility, and expanding healthcare provider education on ART prescribing following positive tests can improve health outcomes. Culturally responsive provider training ensures that care is inclusive and responsive to diverse populations.

Prescribing authority and access

Ensuring timely ART initiation for key populations is enabled by streamlining treatment pathways. This can be achieved by expanding PrEP and ART prescribing authority, integrating PrEP counselling into primary care and maternal programmes, and broadening access through decentralised delivery models by leveraging telehealth, community pharmacies, and specialised clinics in underserved areas.

4.3 Health system-level policy solutions

National Policies and implementation of guidelines

Develop or update national HIV policy strategies to align with UNAIDS 2030 goals, ensuring coverage for key populations, and align treatment guidelines with WHO recommendations while standardising rapid ART initiation and prescribing HIV treatments with a high barrier to resistance, recognising that ART innovation can deliver broader health system benefits beyond individual outcomes, including improved resource management and sustained prevention of transmission. Policies need to go beyond publication to include mechanisms (including data collection) that can track progress in closing gaps in care, prevention, and treatment. There should be appropriate implementation of policy and clinical guidelines by all driving stakeholders across the healthcare system.

Systematic testing

Systematic screening in healthcare entry points, expanding mobile testing units, and reimbursing self-tests and repeat testing will strengthen early detection and linkage to care, including PrEP for negative HIV notifications. Reducing or eliminating the costs that falls on individuals through free community-based testing, prescription-free lab screening, and publicly funded online postal testing services can further reduce barriers, particularly for underserved populations. Strengthening national testing policies to improve early diagnosis by implementing context-appropriate testing strategies, including opt-out or opt-in models based on local prevalence and conditions, and integrating HIV and viral hepatitis screening into routine clinical practice alongside broader STI testing.

Care integration and innovation

There are opportunities to expand HIV testing in primary care, deploy mobile units in underserved areas, leverage digital health innovations like telemedicine and remote adherence support, and integrate mental health services into ART retention programmes.

Coverage eligibility and reimbursement

Financial barriers deter early and continuous treatment, which limit the full potential of HIV innovation. Broadening PrEP and ART reimbursement eligibility across key populations and all individuals in need, including those often excluded such as PWID, sex workers, transgender people, heterosexuals with elevated risk, people in prisons, and undocumented migrants, and reducing out-of-pocket costs helps to facilitate access, particularly for mobile populations who may move across jurisdictions and

require consistent coverage frameworks. Ensuring coverage of self-tests, free postal testing services, and repeat testing helps to streamline processes to prevent treatment delays.

Research, monitoring, and surveillance

Achieving and sustaining viral suppression depends on robust adherence and retention programmes. By strengthening data systems to track viral rebound and patient retention gaps, and enhancing research on late diagnosis and prescribing disparities, the surveillance findings can be used to inform policy adjustments and improve healthcare resource allocation across key populations.

5. Appendices

Appendix A: HIV prevention data availability by country for key populations

Measure of inequity	Country	Latest year	Type of data	Key populations with reported data	Key populations for whom data is not reported
HIV new diagnoses incidence	Australia	2024	National surveillance data	GBM, heterosexual men and women, transgender people, migrants, Indigenous people, PWID, sex workers	Racial/ethnic minorities, low-income, homeless
	Canada	2024	National surveillance data	GBM, heterosexual men and women, PWID	Transgender people, racial/ethnic minorities, low-income, sex workers
	France	2024	National surveillance data	GBM, heterosexual men and women, transgender people, migrants, PWID	Racial/ethnic minorities, low-income, sex workers
	Germany	2024	National surveillance data	GBM, heterosexual men and women, migrants, PWID	Transgender people, racial/ethnic minorities, low-income, sex workers
	Italy	2024	National surveillance data	GBM, heterosexual men and women, migrants, PWID	Transgender people, racial/ethnic minorities, low-income, sex workers
	Japan	2024	National surveillance data	GBM, heterosexual men and women, migrants	PWID, transgender people, racial/ethnic minorities, low-income, sex workers
	Spain	2024	National surveillance data	GBM, heterosexual men and women, migrants, PWID	Transgender people, racial/ethnic minorities, low-income, sex workers
	United Kingdom	2024	National surveillance data	GBM, heterosexual men and women, transgender people, migrants, racial/ethnic minorities, PWID	Low-income, homeless, sex workers, incarcerated people
PrEP uptake	Australia	2024	National surveillance data	Age, GBM-specific data	Transgender people, racial/ethnic minorities, low-income, migrants, sex workers, incarcerated people
	Canada	2022	National surveillance data	Male, women	Transgender people, racial/ethnic minorities, low-income, migrants, sex workers, incarcerated people
	France	2024	National surveillance data	Male, women, low-income	GBM, transgender people, Indigenous people, sex workers, incarcerated people
	Germany	2024	National surveillance data	GBM, women, sex workers, migrants, transgender people	Racial/ethnic minorities, low-income, incarcerated people
	Italy	2024	National surveillance data	Overall only	All key populations
	Japan	Not reported	Not reported	Not reported	All key populations
	Spain	2024	National surveillance data	Male, women, low-income	GBM, transgender people, Indigenous people, sex workers, incarcerated people
	United Kingdom	2024	Regional surveillance data	GBM, heterosexual men and women, racial/ethnic minorities, migrants	Transgender people, low-income, sex workers, incarcerated people

 Data not reported

 Lack of national surveillance data

 No key population breakdown

Appendix B: HIV diagnosis data availability by country for key populations

Measure of inequity	Country	Latest year	Type of data	Key populations with reported data	Key populations for whom data is not reported
Percent of PLWH who are diagnosed	Australia	2024	National surveillance data	GBM, heterosexual men and women, migrants, Indigenous people, PWID	Transgender people, racial/ethnic minorities, sex workers, incarcerated people
	Canada	2018-2022	Peer-reviewed Literature	GBM, heterosexual men and women, transgender people, Indigenous people, race, PWID, incarcerated people	Sex workers, low-income, homeless
	France	2024	National surveillance data	Overall only	All key populations
	Germany	2024	National surveillance data	GBM, heterosexual men and women, PWID	Transgender people, racial/ethnic minorities, low-income, sex workers
	Italy	2024	National surveillance data	Overall only	All key populations
	Japan	2022	Peer-reviewed Literature	Overall only	All key populations
	Spain	2022	National surveillance data	Overall only	All key populations
	United Kingdom	2024	Regional surveillance data	Overall only	All key populations
Late diagnoses	Australia	2024	National surveillance data	GBM, heterosexual men and women, migrants, Indigenous people, PWID	Transgender people, racial/ethnic minorities, sex workers, incarcerated people
	Canada	Not reported	Not reported	Not reported	All key populations
	France	2024	National surveillance data	GBM, heterosexual men and women, transgender people, migrants, PWID	Racial/ethnic minorities, low-income, homeless, sex workers, incarcerated people
	Germany	2024	National surveillance data	Overall only	All key populations
	Italy	2024	National surveillance data	GBM, heterosexual men and women, migrants, PWID	Transgender people, racial/ethnic minorities, low-income, sex workers
	Japan	2024	National surveillance data	Overall and Migrant status only	Most key populations
	Spain	2024	National surveillance data	GBM, heterosexual men and women, migrants, PWID	Transgender people, racial/ethnic minorities, low-income, sex workers
	United Kingdom	2024	Regional surveillance data	GBM, heterosexual men and women, transgender people, migrants, racial/ethnic minorities, PWID	Low-income, homeless, sex workers, incarcerated people

 Data not reported

 Lack of national surveillance data

 No key population breakdown

Appendix C: HIV Treatment, retention, and monitoring data availability by country for key populations

Measure of inequity	Country	Latest year	Type of data	Key populations with reported data	Key populations for whom data is not reported
Percent of diagnosed PLWH on ART	Australia	2024	National surveillance data	Overall only	All key populations
	Canada	2018-2022	Peer-reviewed Literature	GBM, heterosexual men and women, transgender people, Indigenous people, race, PWID, incarcerated people	Sex workers, low-income, homeless
	France	2023	National surveillance data	GBM, heterosexual men and women, transgender people, migrants, PWID	Racial/ethnic minorities, low-income, homeless, sex workers, incarcerated people
	Germany	2023	National surveillance data	Overall only	All key populations
	Italy	2023	National surveillance data	Overall only	All key populations
	Japan	2022	National surveillance data	Overall only	All key populations
	Spain	2023	National surveillance data	Overall only	All key populations
	United Kingdom	2024	Regional surveillance data	GBM, heterosexual men and women, transgender people, migrants, racial/ethnic minorities	PWID, low-income, homeless, sex workers, incarcerated people
ART regimen type	Australia	2024	National surveillance data	Overall only	All key populations
	Canada	Not reported	Not reported	Not reported	All key populations
	France	2020	Peer-reviewed Literature	Overall and Migrant status only	Most key populations
	Germany	2023	Peer-reviewed Literature	Overall only	All key populations
	Italy	Not reported	Not reported	Not reported	All key populations
	Japan	2020	National surveillance data	Overall only	All key populations
	Spain	2020	Peer-reviewed Literature	Overall only	All key populations
	United Kingdom	Not reported	Not reported	Not reported	All key populations
Percent of PLWH on ART with sustained viral suppression	Australia	2024	National surveillance data	Overall only	All key populations
	Canada	2018-2022	Peer-reviewed Literature	GBM, heterosexual men and women, transgender people, Indigenous people, race, PWID, incarcerated people	Sex workers, low-income, homeless
	France	2023	National surveillance data	Overall only	All key populations
	Germany	2023	National surveillance data	Overall only	All key populations
	Italy	2023	National surveillance data	Overall only	All key populations
	Japan	2020	National surveillance data	Overall only	All key populations
	Spain	2023	National surveillance data	Overall only	All key populations
	United Kingdom	2024	Regional surveillance data	Overall only	All key populations

Data not reported
 Lack of national surveillance data
 No key population breakdown

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