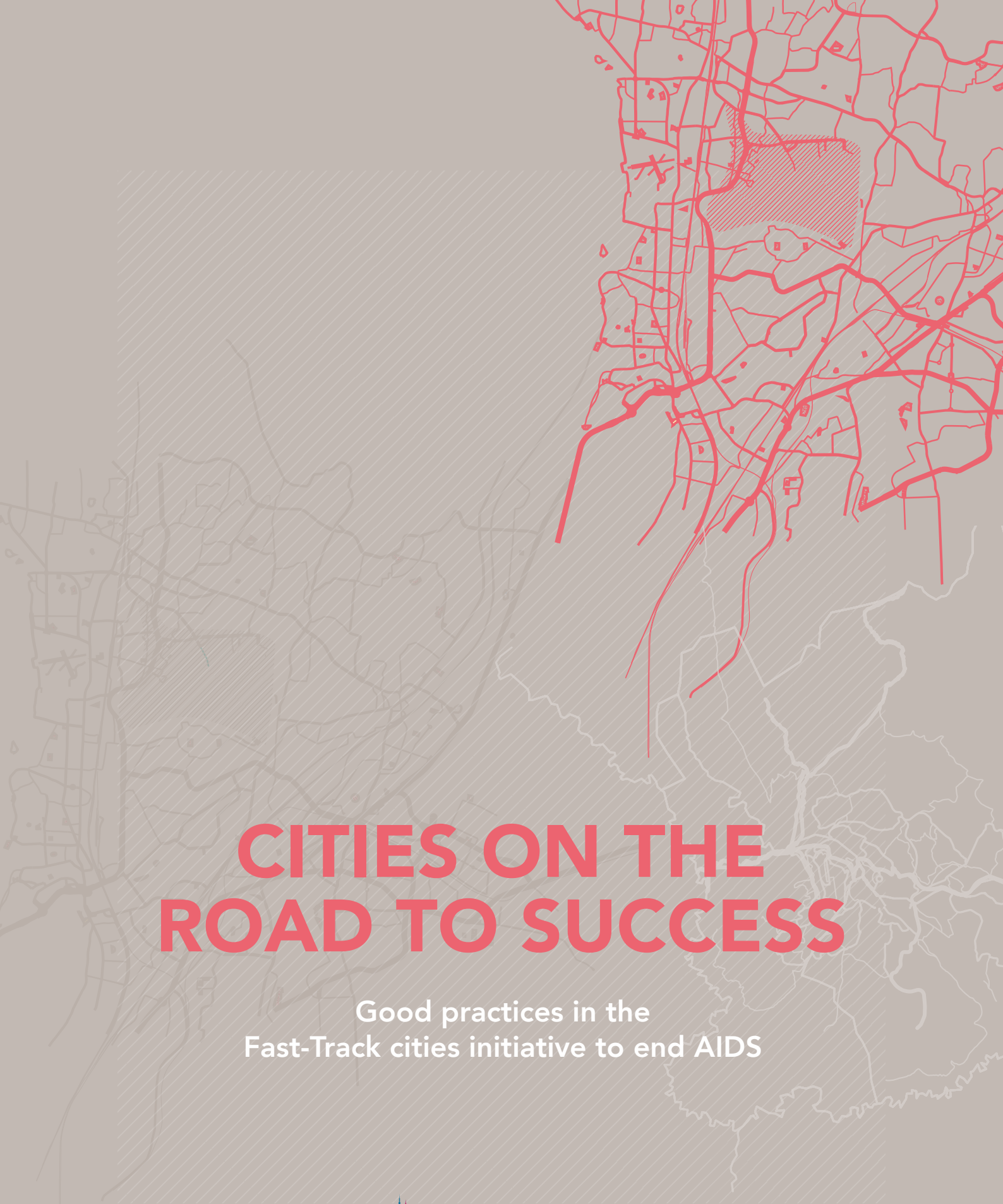

CITIES ON THE ROAD TO SUCCESS

Good practices in the
Fast-Track cities initiative to end AIDS

FAST-TRACK
CITIES

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Good practices in the Fast-Track cities initiative to end AIDS

Contents

Executive summary

In 2014, mayors from 26 cities and key global partners met in the city of Paris and launched the Paris Declaration on Fast-Track Cities Ending the AIDS Epidemic (the Paris Declaration). Since then, more than 300 cities and municipalities have joined the global network and endorsed the Paris Declaration.

The Fast-Track cities initiative is supported globally by UNAIDS, UN-Habitat, the International Association of Providers of AIDS Care (IAPAC) and the City of Paris, in collaboration with local governments from across the world. Its main aim is to galvanize cities to achieve global HIV targets, including the 90–90–90, prevention and stigma elimination targets; to address disparities in access to health and social services; and to meet the global goal of ending AIDS by 2030.[1]

The Paris Declaration was amended in 2018 to include new evidence on the relationship between viral load suppression and transmission of HIV (undetectable equals untransmittable, or U = U), the role of pre-exposure prophylaxis (PrEP), and the importance of integrating services for HIV, tuberculosis (TB), sexually transmitted infections (STIs) and viral hepatitis. It further calls for a more comprehensive approach to address related issues of mental health, substance use disorders and comorbidities associated with aging with HIV.

Cities play a critical role in both the AIDS epidemic and the response. On the one hand, more than half of the world's population currently lives in cities, and in most countries, cities account for a large and growing proportion of the national HIV burden. On the other hand, cities offer advantages and important opportunities for programming, effective action and innovations to end AIDS.

This report describes good practices from a number of Fast-Track cities across the globe. They were selected to illustrate strategies that have been effective in addressing challenges and strengthening policy and programming for HIV, and they provide valuable lessons for other cities in their respective journeys towards ending AIDS as a public health threat by 2030. These strategies include: (a) developing and implementing a city HIV strategic plan; (b) creating an enabling environment; (c) collecting and using good quality strategic information on the HIV epidemic and response; (d) building the capacity of key partners and stakeholders, including in addressing stigma and discrimination; and (e) adopting bold and creative innovations to strengthen service delivery and uptake in the city.

A city HIV strategic plan endorsed by all stakeholders and partners is an invaluable tool to guide cities towards reaching clear goals, to prevent duplication of effort and to ensure that the work is focused and coordinated. The experience of Kigali, Rwanda, illustrates the important role of a five-year strategic plan in coordinating the work of partners that are active in the city. Similarly, the city of Mumbai, India, shows how a situation and response analysis can provide critical information on groups at higher risk of HIV exposure and inform the development of innovative strategies to reach them.

An enabling environment at the national, city and community levels has been fundamental to strengthening the AIDS response in many cities. Two case studies—from the cities of Kyiv, Ukraine, and Johannesburg, South Africa—focus on the importance of political leadership and the engagement and commitment of multiple

[1] The 90–90–90 treatment targets are that 90% of people living with HIV know their HIV status, 90% of people who know their HIV-positive status are accessing treatment and 90% of people on treatment have suppressed viral loads.

stakeholders in advancing progress in the HIV response. The involvement of civil society organizations—in the Fast-Track cities process, the implementation of activities and the delivery of HIV services—has proven successful for Madrid, Spain, and for the cities of Athens and Thessaloniki in Greece.

Comprehensive strategic information on the HIV epidemic and the response enables cities to design effective programmes and monitor their impact. The collection of granular, facility-level data has enabled Yaoundé, Cameroon, and Nairobi, Kenya, to understand which services are needed for different population groups in specific geographic locations. In Nairobi, this contributed to a new city approach that focuses on young people and key populations living in informal settlements.

Building the capacity of health-care workers and community providers to deliver high-quality, appropriate services is critical for achieving the 90–90–90 and other Fast-Track Targets. Ho Chi Minh City, Viet Nam, has piloted a novel training programme to tackle HIV-related stigma. It is now being replicated in other Vietnamese sites. Kingston, Jamaica, is building the clinical and psychosocial skills of health providers through a series of e-learning courses.

Innovations to address access to testing, treatment and viral suppression, especially among key and vulnerable populations, have proven successful in several cities: Jakarta, Indonesia; Bangkok, Thailand; and New Orleans and San Francisco, in the United States of America. These innovations include the use of digital technology to create a chatbot to reach young people at higher risk of HIV exposure (Jakarta), a pioneering strategy for rapid antiretroviral therapy initiation in community settings (New Orleans) and a programme to support the well-being of people aging with HIV (San Francisco).

The report goes on to describe the exemplary strategies that have enabled four cities to become global leaders by meeting and exceeding the 90–90–90 targets ahead of the 2020 deadline, and by reducing to low levels the number of new HIV infections and deaths from AIDS-related illness. These cities attribute their success to the full use of available HIV combination prevention tools (including traditional interventions, such as condom use) and to new biomedical prevention tools such as PrEP and U = U. Similarly, they have benefited from ambitious and creative communication campaigns aimed at reaching key populations.

Each of these four cities has a unique approach to addressing challenges and weak points in their efforts to reach the testing and treatment targets. These include testing during the acute HIV infection period (Amsterdam, the Netherlands), developing the Status Neutral Prevention and Treatment Cycle (New York City, United States), creating an enabling environment (Melbourne, Australia) and intensifying combination prevention methods and rapid treatment initiation (London, United Kingdom of Great Britain and Northern Ireland).

The report concludes with a brief glance **beyond 90–90–90**, focusing on new areas of work that are needed to advance to the final goal of ending AIDS as a public health threat.

The good practices in this report, taken from different continents and vastly different socioeconomic settings, offer evidence, ideas and replicable models to inspire and encourage cities that may be lagging behind. They hold the promise that ending the AIDS epidemic as a public health threat by 2030 is within our grasp.

Figure 1
Cities and municipalities that have signed the Paris Declaration

Source: UNAIDS 2019 data.

*Countries with multiple cities/municipalities that have signed the Paris Declaration:

2	in Benin
31	in Brazil
4	in the Comoros
24	in Côte d'Ivoire
8	in France
17	in Honduras
2	in Italy
3	in Mauritius
3	in the Netherlands
3	in Panama
7	in the Philippines
12	in Portugal
4	in the Republic of Ireland
15	in Senegal
15	in Sierra Leone
13	in South Africa
10	in Spain
2	in Togo
18	in Uganda
5	in the United Kingdom
24	in the United States of America
51	in Zambia

Introduction

The Fast-Track cities initiative was launched in 2014 when mayors from 26 global cities met and endorsed the Paris Declaration on Fast-Track Cities Ending the AIDS Epidemic (the Paris Declaration). Since then, more than 300 cities and municipalities have endorsed the declaration. This pioneering initiative is supported globally by UNAIDS, UN-Habitat, the International Association of Providers of AIDS Care (IAPAC) and the City of Paris, in collaboration with local governments from six continents.

The Paris Declaration aims to galvanize cities to achieve critical Fast-Track targets—including 90–90–90, prevention and stigma elimination targets—to address disparities in access to health and social services, and to meet the global goal of ending AIDS by 2030. Testing and treatment targets are an important focus of the initiative: by 2020, 90% of people living with HIV should know their HIV status, 90% of those who know their HIV-positive status should be accessing treatment and 90% of people on treatment should have suppressed viral loads.

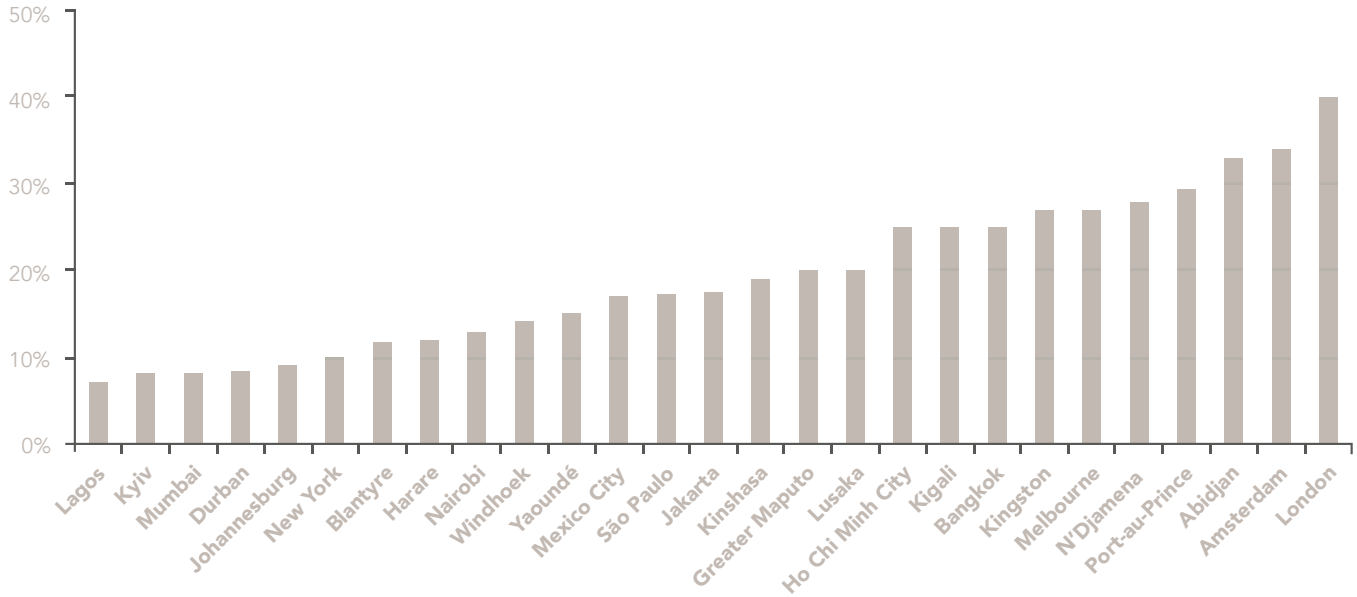
Signatories to the Paris Declaration commit to seven core actions:
1. End the AIDS epidemic in cities by 2030.
2. Put people at the centre of the AIDS response.
3. Address the causes of risk, vulnerability and HIV transmission.
4. Use the city AIDS response for positive social transformation.
5. Build and accelerate an appropriate response reflecting local needs.
6. Mobilize resources for integrated health and sustainable development.
7. Unite as leaders, work inclusively and report annually on progress.

The Paris Declaration was amended in 2018 to include new scientific evidence on the relationship between viral load suppression and the transmission of HIV (known as undetectable equals untransmittable, or U = U) and the role of pre-exposure prophylaxis (PrEP). It also emphasizes the importance of integrating services for HIV, tuberculosis (TB) and viral hepatitis. In addition, the revised declaration calls for a more comprehensive approach to addressing the related issues of mental health, substance use disorders and comorbidities associated with aging in people who are living with HIV.

Cities play a critical role in both the AIDS epidemic and the response. On the one hand, more than half of the world's population currently lives in cities, and in most countries, cities account for a large and growing proportion of the national HIV burden. Risk and vulnerability to HIV is often higher in cities than rural areas due to a range of factors, such as migration, overcrowding, and social and economic inequalities. Urbanization may also bring about cultural and social changes that provide increased opportunities for HIV risk behaviour, and key populations, who are at higher risk of HIV exposure, are often concentrated in urban areas.

On the other hand, cities offer advantages and important opportunities for programming, effective action and innovations to end AIDS. Since the beginning

Figure 2
Proportion of the national number of people living with HIV in major cities



Source: City-specific reported data, 2019.

of the epidemic, strong city leadership has demonstrated the authority to drive the response, and cities have taken the lead in HIV service delivery.

For these reasons, actions taken by cities are contributing significantly to progress in achieving national treatment and prevention targets and to the global goal of ending AIDS by 2030.

This report describes activities and good practices from a selection of Fast-Track cities that represent a range of experiences: from low-burden, high-income countries in the global north to high- and low-burden countries in Africa, Asia, eastern Europe, Latin America and the Caribbean. These are examples of cities that have addressed barriers to the response and optimized service delivery to all citizens, including marginalized and vulnerable populations. Key elements of success include developing and implementing a strategic HIV plan for the specific city, and creating an enabling environment that supports political leadership, accountability and the engagement of civil society and stakeholders in the HIV response. Two additional success factors include the availability and effective use of good strategic information on the epidemic and the response, and capacity-building to strengthen the skills of HIV service providers and communities. This report also describes innovative approaches that have strengthened HIV prevention and treatment services and improved outcomes in the HIV response.

This report covers only a small selection of experiences and good practices from a number of Fast-Track cities. These cities have embraced change and adopted strategies that are bringing them closer to the Paris Declaration targets and the ultimate goal of ending AIDS as a public health threat by 2030.

A STRATEGIC PLAN

In most Fast-Track cities, the AIDS response is enriched by the participation of multiple stakeholders, ranging from local and national governments and civil society organizations to donors, multilateral organizations, researchers and clinicians. A city strategic HIV plan endorsed by all stakeholders is an invaluable tool to facilitate coordination between partners and ensure that the work is complementary, focused and geared towards common goals.

Cities that join the Fast-Track cities network are encouraged to develop a strategic plan for accelerating their response to HIV and related diseases (such as TB and viral hepatitis). Paris was one of the first to respond, launching its AIDS Free Paris plan in 2015 through a process of multiple consultations.[2] Since then, many additional cities have developed locally relevant strategies with support from UNAIDS, IAPAC and other key partners.[3] These plans are developed in collaboration with national counterparts, stakeholders and key partners, taking into account the city-specific situation, and they are typically aligned with national strategies.

An ideal city plan is based on a clear understanding of the city's epidemic situation, including current patterns, recent trends, populations at high risk of infection and geographical areas of high transmission. A detailed assessment of the city's response is also essential, as it provides information on the adequacy of treatment coverage and prevention programming for different populations and locations. This often involves mapping key service providers in the public and private sectors, including faith-based and civil society organizations.

The assessment of the epidemic and response enables cities to identify gaps, barriers and opportunities that need to be considered when planning to scale up and strengthen the availability and quality of services.

The city HIV plan should contain ambitious but realistic targets with clear strategies on addressing barriers to their achievement. Additional elements that are equally important include the following:

- Estimates of resource needs, based on a clear understanding of the costs of interventions and service provision, and on a consideration of efficiency gains.
- A detailed monitoring and evaluation plan that supports the collection of key data on the epidemic and response from the public health system, private sector and civil society. This includes routine surveillance data, patient monitoring data and facility-level data on service provision and coverage. Together, these data will allow governments and partners to track progress and assess impact, and then guide and inform the response.
- A communication plan to ensure transparency in the response and regularly inform stakeholders about actions taken, progress made and results achieved.
- A clear structure or mechanism for engaging key stakeholders and partners.
- An assessment of the legal and policy barriers to accessing HIV services.

2 For more on the AIDS Free Paris (Vers Paris sans SIDA), see: https://www.paris.fr/

3 Guidance can be provided to cities joining the Fast-Track cities initiative to develop city strategic plans.

Table 1
Example of a city-specific approach to Fast-Track the AIDS response

Assess the HIV epidemic and response, identify gaps and set clear targets	Identify and scale up effective and proven interventions	Innovate to strengthen service delivery and uptake for all affected populations
The development of a city plan should be based on a clear understanding of the HIV epidemic and response. For example: ▪ Conduct an analysis of the current HIV epidemic and response, identify gaps and barriers, and agree on priorities for the response. ▪ Set ambitious but realistic targets based on a clear understanding of the epidemic and response, with due consideration for all affected populations and aligned to national targets.	Agree on the most appropriate and effective interventions, based on the city epidemic situation and the populations most affected. This could include: ▪ Improve HIV testing and linkage to treatment and care services. ▪ Ensure that people are retained in care and adhere to treatment regimens. ▪ Scale up prevention and care services for all affected populations, including children, young people, key populations, migrants and people living in informal settlements. ▪ Scale up services to prevent mother-to-child transmission. ▪ Address structural barriers, including stigma and discrimination.	Find innovative ways to ensure that all people—including children, young people, key populations, migrants and people living in informal settlements—have access to health services. For example: ▪ Improve uptake of HIV testing and treatment through community-based service delivery and self-testing. ▪ Improve retention in care through the use of information and communication technology. ▪ Establish innovative partnerships with the private sector to broaden options for prevention, testing, treatment and care. ▪ Ensure the availability of prevention services in high-transmission areas (e.g., condom kiosks in epidemic hotspots).

Source: UNAIDS 2019.

This report contains a number of examples of such plans. In this chapter, the city of Mumbai (discussed below) shows how a situation and response analysis has provided critical information on groups at increased risk of HIV infection, facilitating innovative strategies to reach them, while Kigali (also in this chapter) illustrates the important role of a five-year strategic plan in coordinating the work of many partners. In subsequent chapters, the Nairobi City County is presented as a good example of the use of service mapping for key populations and adolescents to influence planning and policy, and the city of London is highlighted to illustrate the merit of a city plan in a complex HIV epidemic.

Collect, analyse and use data that is disaggregated by age, sex and key population	Engage key stakeholders in the response	Manage and coordinate the response, and ensure sustainable funding
Ensure the availability of good quality data to inform the HIV response and to track progress on a regular basis. This includes: ▪ Data on the HIV and TB epidemics, including current status and time trends. ▪ Patient monitoring data. ▪ Service delivery data from the public and private sectors, and from civil society organizations. ▪ Costs of interventions and resource needs. ▪ Use data to track progress towards achieving the Fast-Track Targets. ▪ Review data regularly (and programme modifications, if needed). ▪ Consider creating a dashboard or situation room to visualize the epidemic and response.	Ensure that stakeholders and key partners are engaged in the HIV response. This includes: ▪ Broker dialogue between the Ministry of Health and city administration. ▪ Engage key implementers and the national, provincial and district health departments. ▪ Engage civil society, key population groups and affected communities. ▪ Engage the private sector, academia and donors.	Ensure that a mechanism is in place to coordinate the HIV response in the city. For instance: ▪ Coordinate partner activities. ▪ Convene regular meetings to discuss progress and challenges. ▪ Communicate with all relevant stakeholders on a regular basis. ▪ Report on progress on a regular basis. ▪ Mobilize resources for an accelerated and sustainable AIDS response.

Most Fast-Track cities already have plans based on, or nested in, national HIV strategic plans. The joint UNAIDS-IAPAC Fast-Track Cities project is supporting 15 cities to develop plans of their own to guide implementation, monitor progress, and reach global goals.

Mumbai: identifying gaps and priorities

The capital of the State of Maharashtra, Mumbai is one of the largest cities in India. A large proportion of the city's 12 million residents are migrants from other parts of India, and 40% of the city's population lives in informal settlements.[4] Both migration and living in informal settlements are known to be associated with an increased risk of HIV infection.

Mumbai has one of the highest levels of HIV prevalence in the country, with 0.34% of antenatal clinic attendees estimated to be living with HIV in 2017. The number of people living with HIV in the city and districts is estimated at around 44 700 *(1)*.

HIV prevalence among key populations is much higher than among the general population. In 2017, HIV prevalence among female sex workers, gay men and other men, who have sex with men, and transgender people stood at 5.4%, 0.8% and 3.6%, respectively. Other populations—such as clients of sex workers, long-distance truck drivers and migrants—are also disproportionately affected by HIV *(1)*.

Mumbai was one of the first cities to sign the Paris Declaration in 2014; since then, it has rapidly adopted measures to accelerate progress towards the 90–90–90 testing and treatment targets. At the launch of the city strategic plan in 2019, the Municipal Commissioner of Mumbai, Praveen Singh Pardeshi, affirmed the city's commitment to the goal of ending AIDS by 2030: "Our priorities include reaching the unreached, increasing access to testing and focusing on the continuum of care, including [antiretroviral therapy], with an intensification of efforts on the gaps and challenges."

In April 2018, the Mumbai Districts AIDS Control Society (MDACS), in collaboration with UNAIDS, hosted a workshop for more than 60 participants from government, multilateral organizations and civil society organizations to contribute to what was to become the Mumbai City Fast-Track Plan (2018–2020).

Situation and response analysis

The Mumbai City Fast-Track Plan was based on a 2017 situation and response analysis supported by UNAIDS India, which aimed to identify gaps, challenges and opportunities for the city through an assessment of its HIV epidemic and programme response.

The report found that nearly one third of new HIV infections occur through commercial sex. HIV transmission between regular partners is often facilitated through groups such as the clients of sex workers, migrants and other vulnerable groups *(2)*. Information currently available suggests that issues such as rapid urbanization, migration and changing behaviours have led to the creation of hidden groups that are at high risk of HIV exposure. With the development of

[4] Based on Mumbai city data supplied in August 2019.

communication technologies, for example, patterns of sex work have changed: female sex workers are now more likely to sell sex from home using mobile phones, rather than in brothels and public venues. This presents new challenges for the AIDS response and reaching sex workers and their clients with HIV services *(2)*.

In terms of the response, the report found that MDACS, in collaboration with nongovernmental and community-based organizations, was offering sufficient focused interventions, including prevention and testing services, for key populations and other populations at higher risk of HIV exposure *(2)*. Despite this, there are large numbers of people who are not part of these groups and thus who do not know their status, or who present late for testing.

Key recommendations from the analysis included conducting more regular and detailed analysis of data and upgrading outreach models to reach and address the needs of hidden populations *(2)*. A mix of communication strategies are also needed, as are new strategies to improve linkages from prevention to treatment and to scale up treatment and care services for people living with HIV.

The strategic plan

The Mumbai City Fast-Track Plan puts people at its centre and focuses on key populations and people living with HIV, as well as their spouses, partners and regular clients. The purpose of the plan is to reach the 90–90–90 targets and end discrimination by 2020.

To achieve these goals, the strategic plan aims to reach groups who are at higher risk of acquiring HIV but who do not identify as key populations. These include young people (aged 15–25 years) and temporary migrant workers. In addition to intensifying and adapting prevention programming, the plan prioritizes the integration of primary health, social protection and vulnerability services to meet the needs of focus communities. It also aims to create new partnerships with the private sector and strengthen existing partnerships.

The Mumbai City Fast-Track Plan is evidence-informed, and its implementation depends on comprehensive monitoring that will allow interventions to be shaped and adapted over the long term. It also recommends innovative strategies to leverage funding to ensure the availability of sufficient resources for the HIV response.

The strategic plan has generated a wide range of new activities, from geospatial mapping of the epidemic to innovative approaches to reaching key populations. Examples of the latter include the provision of HIV prevention and testing services for migrant workers at seven rail construction sites, and late evening outreach camps at key population hotspots in the city. A Know Your Status campaign provides screening at railway stations with the aim of normalizing HIV testing, while a new Internet-based peer outreach approach is geared towards gay men and other men who have sex with men who use dating apps and who may engage in high-risk behaviour.

Plans to meet the testing and treatment targets include viral load testing for all people living with HIV by December 2019.

Alongside its strategic plan, Mumbai has developed a detailed communication strategy based on up-to-date information and discussions with focus groups. The strategy is disaggregated for different audiences, such as female sex workers, gay men and other men who have sex with men and transgender people *(3)*. Tailored content and appropriate media will help the messages meet their mark. The intention is to make full use of digital technologies alongside peer education and traditional mass media strategies.

The Mumbai City Fast-Track Plan has support from the city's mayor and municipal authorities, as well as new partners from the private sector.

Figure 3
Elements of the Fast-Track city framework

Source: Mumbai City Fast-Track plan, 2018–2020. Mumbai: India National AIDS Control Organization, Mumbai Districts AIDS Control Society (MDACS).

Kigali: one plan, many partners

The City of Kigali is the capital and largest city of Rwanda, with about 1.1 million residents. It has a generalized HIV epidemic with an HIV prevalence of 6.3%, which is more than twice the national adult prevalence of 2.5%.

Kigali is home to a quarter of the country's people living with HIV: there are an estimated 220 000 people living with HIV in Rwanda, and 57 600 of them reside in Kigali. Factors that increase vulnerability to HIV in the city include a highly mobile population, poverty and growing informal settlements. Key populations, in particular female sex workers, and adolescent girls and young women are particularly vulnerable.

Kigali city authorities have long demonstrated their commitment to addressing the challenges of the HIV epidemic, and they reaffirmed this commitment in 2015 by endorsing the Paris Declaration. Kigali has made good progress in accelerating the city HIV response, and it is one of the first African cities to almost reach global treatment targets: its progress towards the 90–90–90 targets currently stands at 91–94–89 *(4)*.

A coordinated response

The key to Kigali's success is the existence of its five-year HIV plan: the City of Kigali HIV Strategic Plan (2018–2023). In the words of the plan, "a coordinated response remains one of the grand challenges facing policymakers today. Effective coordination facilitates the pooling of efforts of many actors for greatest synergy" *(5)*. The goal of the plan is to reduce HIV incidence rates in Kigali, and this is supported by four main pillars: (1) increasing the percentage of people living with HIV who know their HIV status; (2) increasing voluntary medical male circumcision; (3) increasing condom use; and (4) reducing the transmission of HIV from mother-to-child.

The plan has received high-level support from both the mayor of Kigali and the mayors of the three Kigali districts. The vice-mayor (Social Affairs) presided over a dissemination event in September 2018, which was organized by the City of Kigali in collaboration with the HIV/AIDS Division of the Rwanda Biomedical Centre, the United Nations Children's Fund (UNICEF) Rwanda, UNAIDS and other partners *(6)*. Support for the HIV response in Kigali has also been provided by several United Nations (UN) organizations, including UNICEF, the United Nations Population Fund (UNFPA), the World Health Organization (WHO) and UNAIDS. For example, through the UN Joint Team on AIDS, WHO has supported the Rwanda Biomedical Centre to revise and update HIV and STI guidelines and build the capacity of health-care workers, while UNFPA is working with partners to increase access to sexual and reproductive health services *(7)*.

Partners working in the field of human rights also are fully engaged. In November 2018, a group of 70 participants attended a high-level advocacy meeting opened by the Minister of Health that addressed linkages between human rights, HIV and the prevention of gender-based violence. They included representatives of the Rwandan judiciary, law enforcement officers, health practitioners, civil society organizations and development partners. Together, the participants developed an action plan for judiciary and law enforcement officers *(8)*.

In May 2019, faith-based organizations were mobilized to highlight their role in the implementation of the City of Kigali HIV Strategic Plan, with a focus on their contribution towards the attainment of the 90–90–90 targets. Forty religious leaders from the three districts of Kigali committed to supporting efforts to address HIV; they then followed this commitment by developing an action plan to use their platforms to disseminate evidence on preventing HIV and gender-based violence and to promote retention in care for those living with HIV *(9)*.

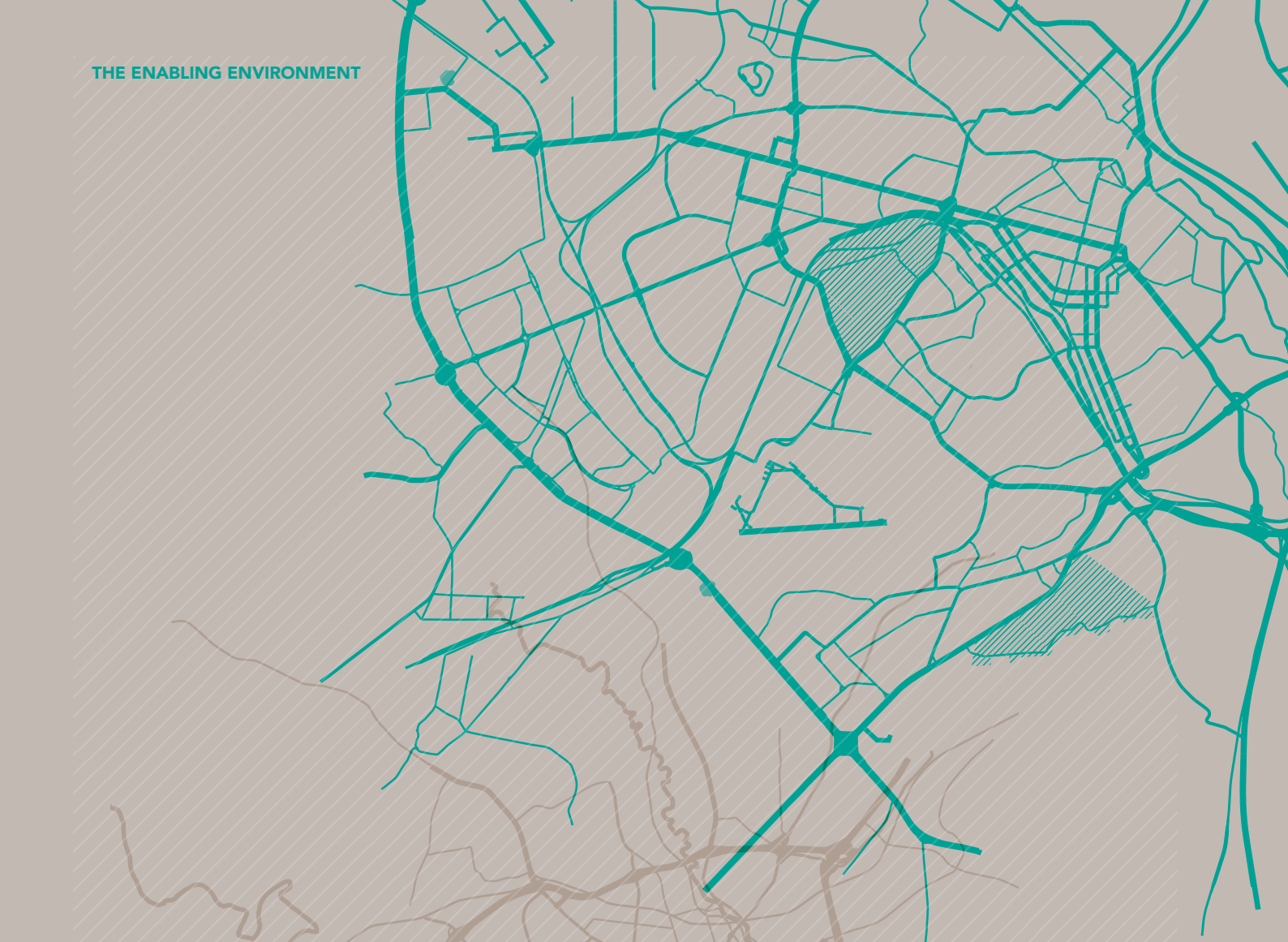
Focused HIV prevention

The City of Kigali HIV Strategic Plan identifies bottlenecks and challenges and proposes solutions to reduce HIV prevalence and expand access to treatment and care. It aims to support the city in reaching the 95–95–95 targets by 2030. Special emphasis will be placed on reducing HIV infections among adolescents; focused interventions are described in specific district operational plans for adolescent HIV and sexual reproductive health.

The plan includes a significant focus on female sex workers. A 2015 survey showed that 55% of female sex workers in Kigali were HIV-positive (the national prevalence of HIV among sex workers is 46%); half had no information about HIV *(10)*. Kigali is committed to meeting this challenge. "The only way to achieve [Kigali's target] is to approach sex workers and have deep discussions with them," said the vice-mayor of Kigali *(11)*.

City of Kigali authorities have already produced maps of hotspots where sex workers are most frequently found, and they have built kiosks in these areas to dispense condoms 24 hours a day. In the first year of operation, four kiosks distributed more than half a million condoms *(5)*. Over the next five years, services to key populations will be increased, including the availability of condom kiosks.

Launching of a condom kiosk in the City of Kigali, Rwanda.
Credit: RBC-HIV Division



THE ENABLING ENVIRONMENT

The experience of the Fast-Track cities initiative demonstrates that creating an enabling environment at the national, city and community levels is fundamental to the challenge of strengthening a city's AIDS response and implementing its strategic plan.

An enabling environment is one that supports the effective implementation of HIV programmes. It allows equitable service coverage and access for all people infected and affected by HIV, and it enables the city to address barriers to service delivery and uptake. The components needed to create an enabling environment include: political leadership, commitment and accountability; strengthened coordination; engaged key partners, including civil society; protection of human rights; efforts to address stigma and discrimination; suitably trained health-care workers; the provision of quality care; and the efficient use of resources.

National laws and policies may impact directly on the capacity of city stakeholders to act. In 2001, for example, Portugal was the first country to decriminalize the possession and consumption of illegal substances. This facilitated Lisbon's exemplary harm reduction services and has contributed to a dramatic reduction in the proportion of HIV transmission attributed to people who inject drugs: from 14% of all male HIV cases in 2007 to 2% in 2016 *(12)*.

The human rights environment is fundamental to city plans, programming, delivery of services and data collection. The example of Nairobi (discussed in the next chapter) shows how the recognition of key populations can contribute to improved health worker training and strengthened service delivery.

At the city level, the engagement and commitment of multiple stakeholders can also create an enabling environment. High-level political support and leadership from mayors and leaders can galvanize the AIDS response, as demonstrated by the example of Kyiv's campaigning mayor (presented later in this chapter). The case study on Johannesburg, also in this chapter, illustrates the importance of high-level support for reviving the city's AIDS coordination structure.

Advocacy is another critical factor. The example of Madrid in this chapter describes how one civil society organization has advocated for the Paris Declaration and campaigned to create awareness of new evidence around biomedical prevention. In many cities, the engagement of civil society organizations as implementers is often critical in providing quality HIV services, thus enabling the city to reach the 90–90–90 targets. For example, the Checkpoint program, described in this chapter, has scaled up community-based HIV testing in Athens and Thessaloniki, and it is recognized as a best practice in the region.

Through a grant from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the United States Agency for International Development (USAID), UNAIDS and IAPAC are currently supporting 15 cities to create supportive environments with clear accountability for the optimization of service delivery, and to ensure that all city residents, including the most vulnerable and marginalized, have access to friendly, good-quality health and social services in environments that are free from stigma and discrimination.

Johannesburg: combining forces to end AIDS

A city of nearly 5 million people, Johannesburg is the economic hub of South Africa, attracting migrants from all over Africa. It is home to approximately 677 500 people living with HIV, and it has an adult HIV prevalence of 16.4% *(13, 14)*.

The city's epidemic is predominantly generalized and heterosexual, but key populations are disproportionately affected by HIV. HIV prevalence among female sex workers is very high at 72%, and HIV prevalence among people who inject drugs and gay men and other men who have sex with men is also significantly higher than it is among the general population: 58% and 43%, respectively. At 14.4%, HIV prevalence among adolescent girls and young women aged 15–24 years is lower than it is among adults in the general population, but more than one third of all new infections in the city are among this age group *(15)*.

HIV prevalence varies across the seven geographical regions of the city according to different levels of socioeconomic challenges, such as proliferating informal settlements, rates of inequality, poor service delivery and environmental decay.

Despite these daunting challenges, Johannesburg is committed to reaching global AIDS targets, having endorsed the Paris Declaration in 2016. Progress towards the 90–90–90 targets is steady: it is currently estimated at 86–65–85 *(16)*.

High-level support

"Not enough attention is given to the fight against HIV and AIDS at a local government level," says the former Mayor of Johannesburg Herman Mashaba *(17)*. "While it is expected for national governments to take the lead on policy, implementation should be the terrain of municipalities. After all, it is municipalities and cities like Johannesburg that are at the coalface of service delivery."

One way that the mayor and the City of Johannesburg have demonstrated their commitment to the HIV response is by supporting the reestablishment of the Johannesburg AIDS Council (JAC).[5] Its purpose is to: (a) coordinate and convene the diverse stakeholders and implementing partners in the city; (b) advocate for and galvanize the HIV response; and (c) provide a platform through which regular feedback and information can be shared.

Partners and stakeholders representing national and local government, multilateral organizations, donors and civil society organizations are engaged in a range of interventions.[6] These include the following:

[5] The Council was initially established in 2001, but over time it ceased to function.

[6] These include Anova Health Institute, the Education Development Center, FHI360, UNAIDS, the United States President's Emergency Plan for AIDS Relief (PEPFAR), the Wits Reproductive Health Institute (RHI) and others.

- Establishing and strengthening adolescent- and youth-friendly services in the community and at schools.
- Providing HIV counselling and testing, treatment, HIV prevention and human rights advice and services for sex workers.
- Improving access, uptake and adherence to services for TB, sexual and reproductive health and HIV (including PrEP).
- Strengthening referral and linkage to gender-based violence services.
- Strengthening psychosocial services for people living with HIV through support groups and enhanced adherence support activities.
- Strengthening the capacity of leaders and advocates to plan and carry out community-level activities to promote equitable gender norms, reduce HIV risk and eliminate gender-based violence.

The Joint UNAIDS–IAPAC Fast-Track cities project supported the appointment of a consultant who drew up the terms of reference for the new JAC, which was established by a resolution of the City of Johannesburg in October 2018. The new JAC is chaired by the mayor and is composed of all members of the mayoral committee (MMCs) and representatives of government departments and 16 civil society organizations.[7] HIV experts and researchers also sit on the council as ex officio members. The work of this multisectoral body is aligned with that of the provincial and national AIDS councils, and it will implement a city plan based on South Africa's National Strategic Plan for HIV, TB and STIs 2017–2022. The Council's first formal meeting is scheduled for September 2019.

The establishment of a city technical team and "nerve centre" is already underway, and a capacity-building plan for council members has been drawn up. Progress towards HIV testing and treatment targets will be monitored through that central nerve centre, which will also contribute to monitoring the overall National Wellness Campaign, which is aimed at putting an additional 2 million people in South Africa on HIV treatment by 2020.

The city epidemic profile

The first step in strengthening the Johannesburg HIV response was to understand its different sub-epidemics by location and population, and to identify the HIV services available to them. Thus, while the formalities of establishing the JAC were proceeding, work began on compiling a regional and district profile and collating key population data for Johannesburg. Mapping of partners working with adolescent girls and young women has also been completed.

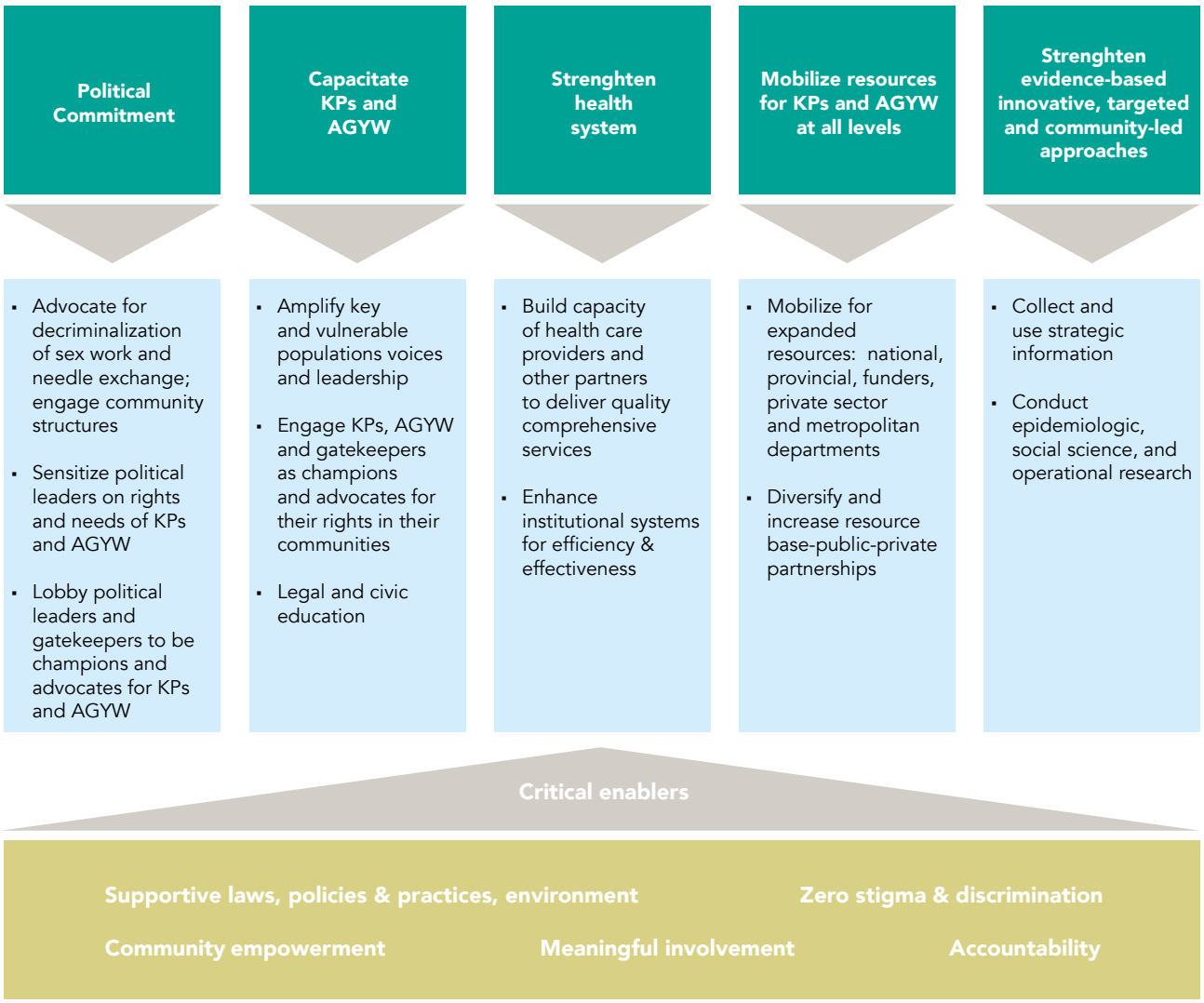
The city profile is intended to assist in identifying performance and coverage gaps, informing and planning a more efficient and effective response to the epidemic, and monitoring progress. It is an essential tool to strengthen weak areas in the response.

[7] The civil society organizations include faith-based organizations and those representing youth, women, people living with HIV, sex workers, business, traditional healers and the lesbian, gay, bisexual, transsexual and intersex communities.

This work has already enabled the identification of four priority regions where HIV prevalence is highest. Unsurprisingly, these are the areas that are home to large informal settlements and/or low-income communities. The exercise also highlighted the need for community-level system strengthening to support and provide services to key populations and adolescent girls and young women.

Data on key populations is currently being used by the JAC and leadership to monitor programme coordination and implementation. The city acknowledges that key populations and adolescent girls and young women are disproportionately affected by HIV, and that a sustainable response will not be achieved without addressing their particular needs.

Figure 4
City of Johannesburg: Advocacy position



Source: City of Johannesburg: District profile. Epidemic trends, 2017/2018 (1st Edition).

Kyiv: leadership in action

Kyiv is the capital of Ukraine and the country's most populous city, with nearly 3 million inhabitants.[8] There are an estimated 19 800 people living with HIV in Kyiv, with HIV prevalence ranging from 0.3% to 0.6% across the city's 10 districts *(18)*.

The HIV epidemic in Kyiv is largely concentrated among key populations. Kyiv city data from 2017 show that HIV prevalence is highest among people who use drugs (26%), gay men and other men who have sex with men (7%) and sex workers (7%) *(18)*.

In April 2016, Kyiv was the first city in the region to endorse the Paris Declaration. The ceremony was attended by diplomats and leaders of Ukrainian and international organizations engaged in the AIDS response. "We've joined the Fast-Track program to end AIDS," said Mayor Vitaly Klitschko. "As chairman of the Ukrainians Cities Association [sic], I propose engaging other cities of our country in the program" *(19)*.

Since then, a concerted multipartner collaboration has worked tirelessly to reduce new infections and meet the 90–90–90 treatment targets in Kyiv. A detailed city profile has been completed, and a Fast-Track city strategic plan for 2017–2021 was developed that aims to have 82% of people living with HIV accessing antiretroviral therapy by 2020. In 2016, the city also mobilized considerable new resources to fund the plan, approving a budget of 238 million Hrv (approximately US$ 8.5 million) for prevention and treatment, including harm reduction for drug users.[9]

Central to the plan has been the redesign of HIV testing and treatment service delivery, shifting from a model of specialist services provided at the city's AIDS Centre to a public health approach, where services are available at all health facilities. This has been accompanied by extensive training of health-care workers to reduce stigma and discrimination. Antiretroviral medicines, previously only available at the AIDS Centre, are now dispensed through other health facilities and a network of municipal pharmacies.

Leadership and partnerships

The Mayor of Kyiv has played an active part in the city's Fast-Track agenda, and he personally attends local and international meetings along with civil society counterparts. For example, at the High-Level Meeting on Fast-Track Cities in New York City in 2016, he reaffirmed his commitment to the first 90: "The main thing today is to ensure treatment of 90% of HIV-positive people in the city. Mass screening and an awareness campaign will help more people learn their HIV status and start treatment on time" *(19)*.

[8] This official figure may an underestimate. Internal migration from conflict and other causes may have doubled the city's population.

[9] This amount includes donor funding, such as from the Global Fund to Fight AIDS, Tuberculosis and Malaria.

The municipal authorities work closely with civil society organizations to plan and implement the city's Fast-Track response. The coordinating body, the Municipal Council on HIV/TB, is co-chaired by the deputy head of the Kyiv City State Administration and the head of the Kyiv Network of People Living with HIV (100% LIFE), the largest patient-led organization in Ukraine. The Network and other civil society organizations are equal working partners in all meetings of the Kyiv Health Department. Civil society organizations also are implementing prevention, care and support programmes among key populations through funding from grants from the Global Fund to Fights AIDS, Tuberculosis and Malaria (the Global Fund). In 2018, they reached 43% of gay men and other men who have sex with men, 46% of sex workers and 63% of people who inject drugs *(20)*. In the fall of 2019, civil society organizations also will receive government funds to implement HIV services.

Partnerships with donors and the private sector also are strengthening service delivery. For example, the city administration provides free premises for a popular downtown HIV testing facility, the Youth Information Centre on HIV, which is supported by the Olena Pinchuk Foundation. In 2017, the Foundation donated US$ 250 000 towards the purchase of the antiretroviral medicine dolutegravir, enabling the city to improve its drug regimens.

In the three years since Kyiv signed the Paris Declaration, there has been remarkable progress in the city. For example, the availability of HIV testing services at all municipal health facilities has resulted in a 31% increase in the coverage of rapid testing. The number of sites providing antiretroviral therapy has expanded from three to 30, contributing to a tripling of people on treatment and a significant improvement in testing and treatment targets (from 55–66–73 in 2016 to 73–73–96 in 2018) *(20)*.

Key populations in particular have benefited: the number of sites providing opioid substitution therapy for people who inject drugs has increased from three in 2016 to 11 in 2018. PrEP, unavailable in 2016—and available to only 125 gay men and other men who have sex with men in 2018—will be expanded to 1270 people at higher risk of HIV exposure in 2019. In addition to gay men and other men who have sex with men, PrEP also will be available to HIV-negative partners in serodiscordant couples.

Kyiv's commitment has inspired other cities in eastern Europe to join the Fast-Track cities network. For instance, Odessa—which has a large population of people living with HIV—signed the Paris Declaration in 2017 and is committed to accelerating the city's AIDS response.

Political will and leadership have been at the heart of this transformation. In his foreword to the 2018 Kyiv Fast-Track report, Mayor Klitschko summed it up: "For me, the life of each person is valuable, and no Kyiv residents will be left alone, without care and support" *(18)*.

Madrid: community drives the Fast-Track response

Madrid is Spain's capital and largest city, with a population of more than 6.5 million in its metropolitan area. Spain's health system offers free health care to all residents. There are around 150 000 people living with HIV in Spain; of these, 120 000 are on treatment *(21)*.

There are more than 1000 new HIV infections in Madrid each year, and around 40% of people living with HIV have delayed diagnosis.[10] The city's epidemic is concentrated among key populations, particularly gay men and other men who have sex with men, who accounted for 70% of new infections in 2017. Heterosexual transmission accounted for a further 26% of new infections, with injecting drug use representing the remaining 4%. Madrid has made progress in its AIDS response: AIDS cases have declined significantly in recent years, from 374 in 2010 to 141 in 2015 *(22)*.

In a recent IAPAC survey on the quality of life of people living with HIV, 87% of Madrid respondents reported that they were consistently on antiretroviral therapy, although only 30% rated their health to be "very good" over the past 12 months. Only one third were satisfied with the quality of their HIV care and 43% were satisfied with their quality of life. Many had experienced stigma from their community (38%), although only 18% felt stigmatized by their health-care facility *(23)*.

The mayor of Madrid signed the Paris Declaration in December 2016. Since then, there has been more collaboration between stakeholders working on the Fast-Track city response, with the active participation of civil society organizations. The objective of Madrid's Fast-Track road map for the first year was to develop strategies to strengthen the first 90 and reduce HIV-related stigma. Key activities in the road map include strengthening strategic information on testing and treatment targets, stakeholder mapping, research and communications.

Community mobilization

Civil society has been a driving force for the development of the Fast-Track road map through Apoyo Positivo, Madrid's leading support group for people living with HIV. The organization has participated in the official Fast-Track city working group, and it leads communication activities for promoting the city's response through articles, blogs, conference presentations, community events and campaigns. The organization has also played an important role in mobilizing the Madrid Council to coordinate resources, and it is working with other organizations to strengthen the collection, analysis and use of strategic information and stakeholder mapping.

Apoyo Positivo's unique strength lies in its ability to mobilize the community to support action towards reaching the Fast-Track targets. It has led a number of successful community education campaigns, such as Touchdown, a campaign with the Spanish lesbian, gay, bisexual, transgender and intersex (LGBTI) rugby team,

[10] A CD4 count of <350 mm^3.

which introduced the 90–90–90 targets and other tools to explain and implement activities related to the Paris Declaration. The organization has also developed the Sex, Drugs and You programme, which implements an integral response to chemsex in collaboration with the public health care system.[11] This has been integrated into the strategic plan.

Importantly, Apoyo Positivo has campaigned to raise awareness around the scientific evidence that people with viral suppression cannot transmit HIV (U = U). This evidence has not been well understood in the city by clinicians or the community. The organization's online Undetectables media campaign informs the public about U = U through drama, humour and realistic role models.

Apoyo Positivo advertising in Madrid for Casa (top) and U = U.
Credit: Apoyo Positivo

Apoyo Positivo reaches more than 20 000 people a year through its community centre, Casa, which provides HIV prevention, testing and treatment adherence services. Apoyo Positivo also provides a wide range of sexual health, mental health and social services, and it has worked consistently and in different ways to tackle HIV-related stigma. Its unique position in the city has strengthened the enabling environment for the HIV response in Madrid.

[11] Chemsex refers to the use of potent substances, drugs and sex apps by gay men and other men who have sex with men before or during sex. It is associated with increased HIV risk.

Athens and Thessaloniki: a best practice in community-led testing

In 2018, there were an estimated 14 000 people living with HIV in Greece, where the epidemic has been driven largely by unprotected sex between gay men and other men who have sex with men. In 2018, gay men and other men who have sex with men accounted for 51% of new infections; this was followed by heterosexual transmission (29%) and transmission among people who inject drugs (20%) *(24)*.

The Greek financial crisis that began in 2010 had a significant impact on HIV programmes in the country, disrupting HIV services. Testing services were reduced, fees were introduced in state hospitals and diagnostic stock-outs became common. This led to the decision by Positive Voice, the Greek association of people living with HIV, to establish community-based HIV testing services in the two largest cities in the country. The program, called Checkpoint, was launched in Athens in 2012 and in Thessaloniki two years later.

Checkpoint

The aim of Checkpoint is to reduce the number of undiagnosed people living with HIV, syphilis, and hepatitis B and C. In particular, it seeks to increase testing among gay men and other men who have sex with men.

To accomplish this, Checkpoint offers a holistic approach that includes personalized risk assessment for every person accessing services and peer-to-peer pre- and post-test counselling. There is also a retest reminder service, referral to other services and linkage to care when needed.

Checkpoint services in both cities are centrally located and have friendly, nonclinical environments that offer convenient opening hours, five days a week, through scheduled or drop-in appointments. Other activities include outreach with testing and materials distributed in gay bars and at festivals, rehabilitation centres, sex cinemas and refugee camps. A mobile unit reaches groups involved in high-risk behaviour outside the main urban centres, while the Checkpoint website provides information on prevention that is aimed at gay men and other men who have sex with men and transgender women, including chemsex, PrEP, U = U and the proper use of condoms.

Checkpoint's goal is to normalize testing and create a culture of testing among gay men and other men who have sex with men. Stigma and discrimination are tackled by promoting the beneficial impact of early treatment and its prevention dividend (U = U).

Checkpoint has been successful in reaching young people. For example, 28-year-old Dimitris considers himself lucky to have discovered his positive status at the Athens Checkpoint, because it provided him with reassurance and support, both before and after the test. "I am so glad my counsellor took the time to explain to me how medical science has advanced and how treatment offers a normal life nowadays," he said *(25)*.

Maintaining quality

Checkpoint staff receive ongoing support from the scientific staff of the national

agency, the Hellenic Centre for Diseases Control and Prevention (HCDCP), which provides regular supervision and evaluation. Checkpoint staff members also participate in yearly training and seminars provided by the HCDCP, and they are trained on different HIV prevention programme evaluation tools and participate in numerous national and European Union training projects and conferences.

Testing is monitored through the use of a data collection form that covers information on a range of indicators, such as demographics, past testing history, sexual practices, alcohol and drug use, reasons for getting tested, testing results, referral information, HIV knowledge level of the client, reminders for retests and more.

Achievements

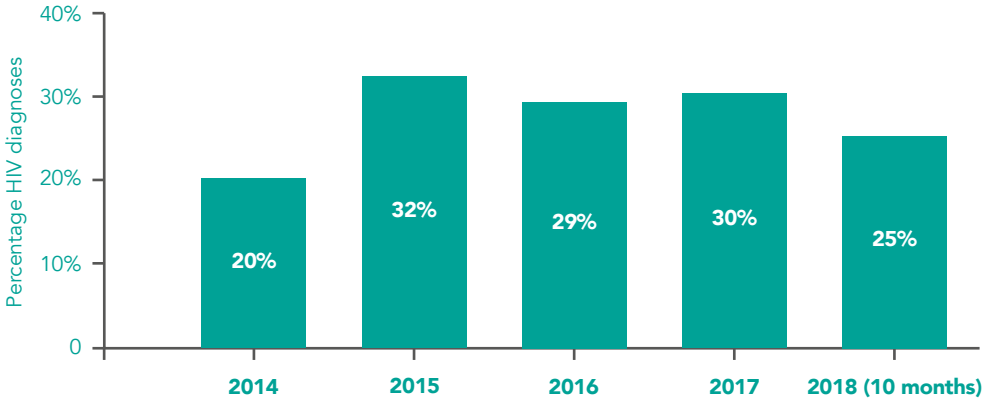
Since their establishment, the two Checkpoints have performed more than 75 000 HIV tests for more than 58 000 people, of whom 45% had never been tested before. Ninety-five per cent of people with positive tests were linked to care for a confirmatory test *(26)*. In support of HIV prevention, more than 5 million free condoms and more than 400 000 leaflets and informative materials had been distributed by 2018 *(27)*.

National HIV and AIDS epidemiological reports issued by HCDCP found that more than 30% of all new HIV cases in Greece from 2015 to 2017 had been screened at, and referred by, the two Checkpoints. These services thus contribute significantly to Greece's HIV prevention strategy *(27)*.

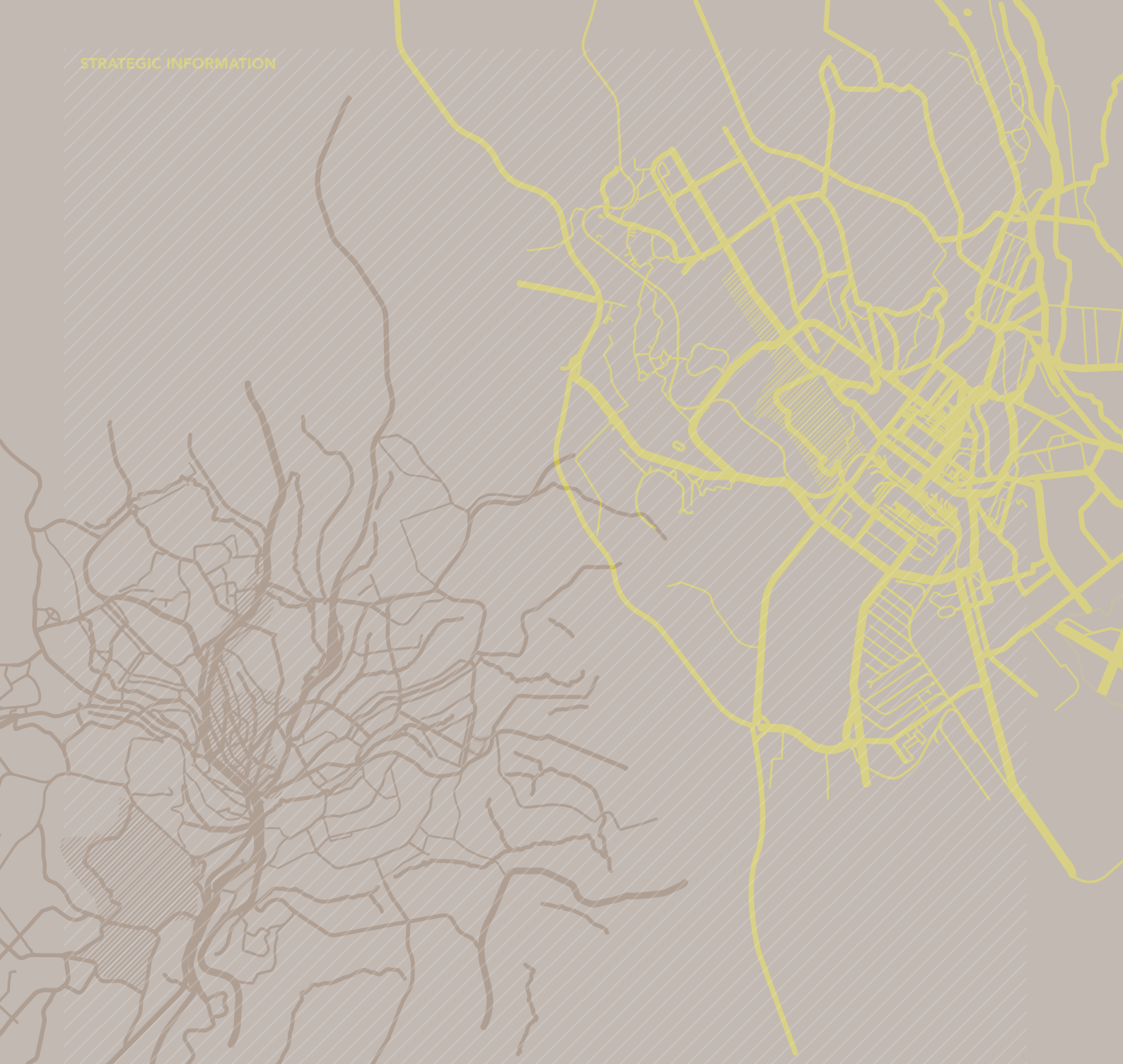
The programme has received international recognition, winning the 2016 European Citizen Award and a 2017 Healthcare Business Award. The European Centre for Disease Prevention and Control sees Checkpoint as a best practice in holistic testing and prevention services for HIV and STIs *(26)*.

The Checkpoint model has become an example of best practice in the region, and similar services are now operating in countries such as Bulgaria, Croatia, Cyprus, the Republic of Moldova and Slovenia.

Figure 5
Percentage of Checkpoint HIV diagnoses per year (compared to HCDCP)



Source: Chanos S. Comprehensive HIV testing services in Athens and Thessaloniki Checkpoint. Powerpoint presentation at Zagreb European Testing Week (ETW)/Integrate meeting.



STRATEGIC INFORMATION

Strategic information and a sound monitoring and evaluation system are fundamental to the Fast-Track cities initiative. Cities need strategic information and data on the HIV epidemic and response to design effective programmes, monitor progress in the response and assess the impact of the response on the epidemic.[12] Data also are needed to identify gaps and barriers in the delivery of services, modify programmes and improve the quality and reach of services.

The Fast-Track cities initiative is encouraging cities to improve the collection and analysis of data, to report data in the public domain and to make it available to relevant partners. In this way, evidence can be used to inform city activities and programmes. At the start of the initiative, there were significant gaps in critical indicators, such as the care continuum, and a reluctance to make data public as part of the accountability framework called for in the Paris Declaration. Just a few years later, however, several Fast-Track cities have baseline data, much of which is publicly available on interactive city dashboards housed on a Global Fast-Track Cities web portal developed by IAPAC.[13] These dashboards are developed in collaboration with the respective cities, and they display available data (including prevalence and incidence trends, 90–90–90 progress, the care continuum and other locally relevant data) from participating cities in a user-friendly format that can be used for programming, advocacy and communications.

Through support from UNAIDS, the initiative is also building city capacity on strategic information and monitoring and evaluation. Several cities have been supported to develop models to produce epidemic estimates and trends, and UNAIDS is currently working with key technical partners to enable modelling at the subnational, district and city levels, as shown in Figure 6.

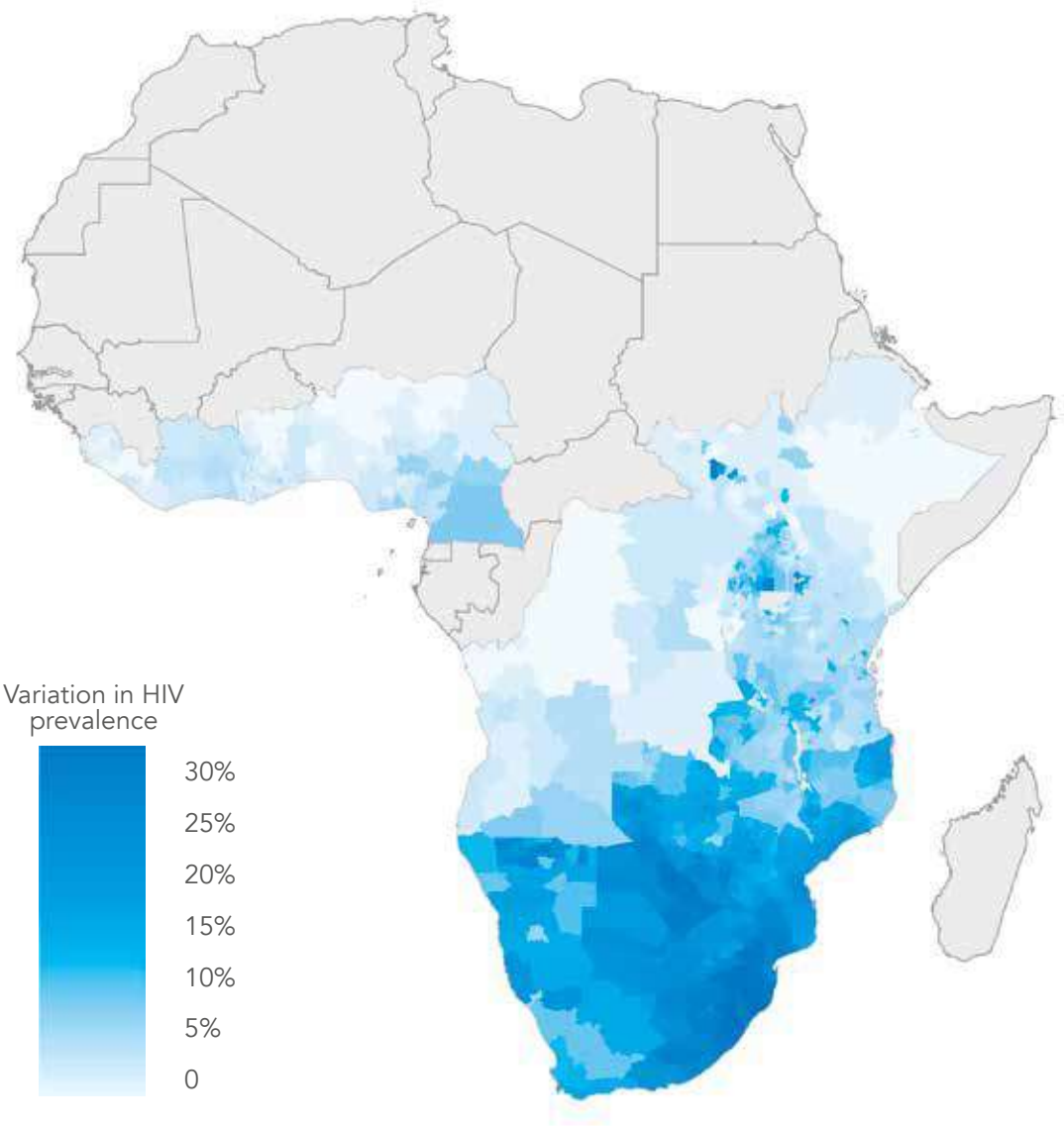
[12] Data to be collected include (at a minimum): HIV prevalence; incidence and mortality; antiretroviral therapy coverage; treatment adherence; and the uptake of PrEP, PMTCT, voluntary medical male circumcision and condom use. These data should be disaggregated by age, sex, population and location.

[13] Please see: http://www.fast-trackcities.org/

The first step for many Fast-Track cities is to compile available data on the epidemic and response and to assess its adequacy. Data need to be disaggregated by age, sex, population at increased risk and location. Two cities in this chapter, Yaoundé and Nairobi, embarked on a process to collect granular and facility-level data on the HIV epidemic. The results showed significant geographical variation that was not always matched by the availability of HIV prevention and treatment services. In the case of Nairobi, this evidence contributed to a new city approach that focuses on adolescents, young people and key populations in informal settlements. Amsterdam (described in a later chapter) is an example of a high-income city that is using sophisticated geomapping to identify the missing 6% of people diagnosed with HIV who are not receiving treatment.

Improving strategic information should not be an isolated exercise. Routine surveillance systems that collect data on epidemic trends over time and by population are essential to monitor progress and identify challenges. For example, the city of London has shown that by examining trends over time, it is possible to identify the most effective strategies for reducing new HIV infections (described in a later chapter). In the case of Brazil, described later in this chapter, the national government has provided training to enable high-burden cities to conduct their own routine surveillance.

Figure 6
Variation in HIV prevalence among adults (15–49) at subnational levels.



Source: UNAIDS special analysis, 2019.

Yaoundé: seven profiles for seven districts

Yaoundé, with a population of more than 3 million people, is the capital of Cameroon and home to approximately 82 000 people living with HIV, or 15% of the national HIV burden *(28)*.

The city has a generalized HIV epidemic with an overall prevalence of around 4%. There are concentrated epidemics among key populations, with prevalence reaching 25% among female sex workers and 21% among gay men and other men who have sex with men *(28)*.

Yaoundé is an urban community where the function of the mayor is fulfilled by a government delegate appointed by presidential decree. The city is divided into seven administrative districts or subdivisional councils with elected municipal councils, each with its own mayor who has oversight over district health, including HIV activities, and a responsible focal person trained in HIV.

This complex structure presents both challenges and opportunities for coordinating the city's HIV response. All seven mayors have signed the Paris Declaration and have committed to integrating HIV interventions into local development plans. The city's seven mayors also support community mobilization at special events, such as World AIDS Day and national celebrations. They have recently begun using official wedding celebrations to share HIV prevention messages.

District profiles

Yaoundé was enrolled in the Joint UNAIDS–IAPAC Fast-Track Cities project in 2018 and immediately set to work strengthening the evidence base for the city's HIV response. Baseline data were collected for all seven districts, which enabled the development of district epidemiological profiles. The exercise showed that HIV prevalence varies widely across the seven districts, ranging from approximately 3% to 6%. District profiles are further disaggregated by age and gender.

In addition, data on HIV testing, the prevention of mother-to-child HIV transmission and treatment services were compiled, and mapping of services for people living with HIV across the seven districts was completed. Key population hotspots across Yaoundé were also mapped to identify areas with greater needs for prevention services.

A city action plan

The type of disaggregated data collected by Yaoundé is fundamental to the identification of high-burden locations and populations, and it helps pinpoint priorities for strengthening prevention, testing and treatment. It is also essential for a decentralized response, where individual town halls are responsible for mobilizing action and resources to meet Fast-Track Targets. The maps and data have been compiled into fact sheets for use by the authorities. The information was presented at technical meetings, and it directly informed the development of the Yaoundé City Action Plan for 2018–2020, which was launched and validated at an event chaired by the Minister of Public Health in December 2018 and attended by all seven district mayors and other district stakeholders.

Nairobi City County: the value of evidence

Nairobi is the capital city of Kenya and home to a number of highly mobile populations, including internal migrants and refugees. There are an estimated 191 000 people living with HIV in the city, which accounts for 13% of the national HIV burden. Overall, the city has an adult prevalence of 6% *(29)*.

Rapid urbanization and high levels of poverty in informal settlements have contributed to increased risk of HIV transmission in the city. HIV prevalence in informal settlements is almost double that of the city average, while key populations—such as female sex workers and gay men and other men who have sex with men—are particularly vulnerable, with HIV prevalence of 23% and 18%, respectively *(29)*. The majority of new HIV infections are estimated to occur among adolescents and young people (46%) and key populations (33%) *(29)*.

Nairobi was one of the original signatories of the Paris Declaration in 2014. A city AIDS and TB strategy was developed in 2015, and the city has shown strong commitment to Fast-Track its HIV response. Five years later, Nairobi has made good progress in offering HIV prevention and treatment services, including to key and vulnerable populations: estimated HIV prevalence fell from a high of 14% in the 1990s to 8% in 2013, and then to 6% in 2018 *(30)*. The city HIV testing and treatment targets stand at 78–99–82, while PrEP has been rolled out in close to 80 facilities *(29, 31)*.

The key to Nairobi City County's success is its commitment to collecting and using accurate strategic information to understand the HIV epidemic and drive the response.

Collecting granular data

In 2017, Nairobi City County authorities collected facility-level data to improve understanding of the HIV epidemic and its response at the local level. All health facilities offering HIV and TB services in the county were mapped, and data were analysed to identify barriers and bottlenecks to service delivery. The exercise showed that 60–70% of Nairobi residents live in about 200 informal settlements that occupy just 6% of the land. These informal settlements were concentrated in four subcounties where HIV prevalence was almost double that of the whole city (12% compared to 6%). HIV prevalence was highest in the informal settlement of Kibera (around 16%) *(32)*.

A related mapping exercise was conducted to develop a detailed understanding of the availability and quality of services available for adolescents and young people and key populations in these four subcounties.

Assessing health services

A qualitative assessment of services for adolescents and young people and key populations was done in 24 health facilities: nine that were government-owned, eight that were private and seven run by faith-based organizations. Focus group discussions and interviews were conducted with service users and health workers *(34)*.

This assessment made it possible to identify gaps and barriers in service delivery for both groups (adolescents and young people and key populations). While satisfaction was expressed by service users, there were concerns and problems. The assessment showed that less than half of the facilities provided adolescent-friendly services, and that only three facilities offered key population-friendly services. In addition, none of the services met the national standards for comprehensive adolescent-friendly services. Key population-friendly services were only available in private, non-profit organizations and there was an unequal distribution of appropriate services for both groups between the subcounties *(34)*.

Overall, adolescents and young people and key populations identified a lack of staff training as a hindrance to providing appropriate services. These groups felt that staff in most health facilities lacked the technical skills, empathy and professionalism required to deal with their particular needs *(34)*.

Recommendations to improve the quality of services for these groups included establishing friendly centres in each subcounty, creating functional referral networks, and including peer educators and outreach workers to strengthen services (34). The report also recommended specific training for health-care workers who deal with adolescents and young people and key populations, as well as continuous mentorship. All staff on the site—not just health workers—should be sensitized to the special needs of these groups *(34)*.

From recommendations to action

The results of the qualitative assessment exercise informed a review of the national guidance on adolescent care, which was conducted with the active participation of adolescents and young people. Fifty health-care workers—including clinical officers, nurses, medical social workers and counsellors—were then sensitized and trained according to the new guidance.

Training on key population services was also conducted for 55 health workers from government health facilities in the four subcounties, with participation from representatives of the communities of sex workers, gay men and other men, who have sex with men, and people who use drugs. Both the training and the participation of the members of key populations challenged the attitudes and prejudices of health workers to great effect, resulting in health-care workers expressing regret about their previous poor attitudes towards (and treatment of) key populations.

Good practices and lessons learned from the adolescent and key population interventions have been documented, and the results will inform the national curriculum on the provision of services for adolescents and young people and key populations.

The Nairobi experience shows the value of strategic information in effecting change. "The evidence was very influential and has mobilized political commitment," says Carol Ngunu, Deputy Director of Health Service for Nairobi City County. "It has led to a lot of change across the city" *(35)*.

Brazil: monitoring the epidemic in high-burden cities

With a population of 200 million, Brazil is the largest country in the Latin America and Caribbean region. It also has the largest HIV epidemic, with 900 000 people living with HIV. HIV prevalence is concentrated among key populations, with an estimated 5% of female sex workers and 18% of gay men and other men who have sex with men living with HIV (compared to 0.5% of the general population) *(36)*.

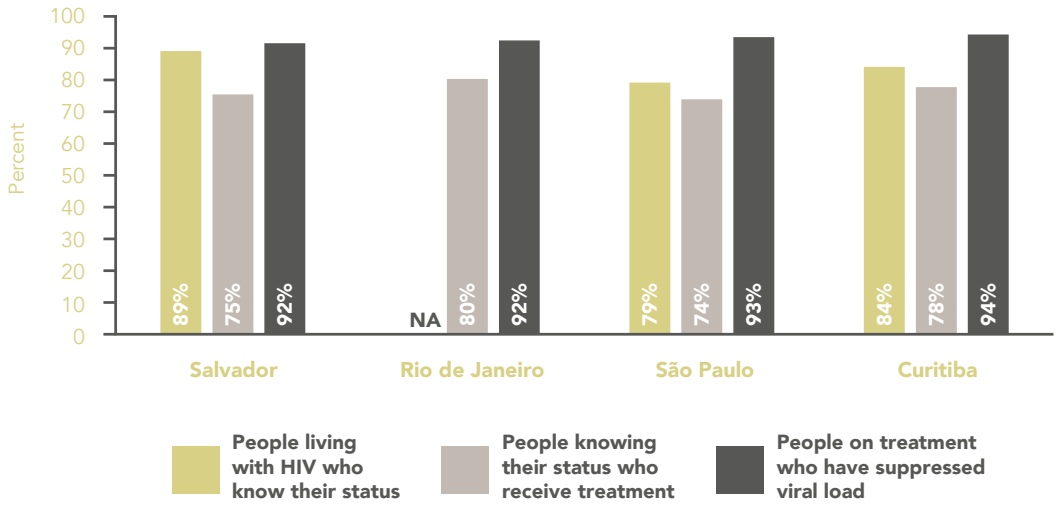
The HIV epidemic is concentrated in the larger cities of the South-East, where around 40% of Brazilians live. The four cities of Curitiba, Rio de Janeiro, Salvador and São Paulo account for 11% of the country's population, 19% of its people living with HIV and 26% of its deaths from AIDS-related illness *(37, 38)*. Numbers of people living with HIV range from 126 000 people in São Paulo to 17 000 in Salvador.

All four cities have endorsed the Paris Declaration and have Fast-Track strategies to reduce new HIV infections and increase testing, treatment and care. They benefit from Brazil's supportive national policies, such as the availability of PrEP and universal access to antiretroviral therapy in the public sector. The four cities are on track to achieve the 90–90–90 treatment targets (see Figure 7).

Monitoring the epidemic and the response

A clinical monitoring system was implemented in 2014 that allows for the estimation of specific indicators for all Brazilian states and cities. In 2016, guidelines were published on estimating the HIV cascade, with the aim of

Figure 7
Cities on the road to 90–90–90



Source: Pascom A. Implementation science in action – Fast-Tracking the AIDS response in high HIV burden cities. 12th International Conference on HIV Treatment and Prevention Adherence, Miami (Florida), June 2017.

decentralizing the methodology to states and municipalities. In 2015 and 2016, states and municipalities, including the four Fast-Track cities, also received training on cascade estimation.

In 2016, the Brazilian Ministry of Health launched a website that presents the HIV profile of Brazilian states and municipalities. In 2017, municipal data gaps were discussed in a Brazilian Fast-Track cities consultation coordinated by the Ministry of Health, IAPAC and UNAIDS. The system was upgraded later in 2017 to include clinical monitoring indicators for all municipalities of more than 50 000 inhabitants. Data are updated once a year.

Monitoring the HIV cascade and beyond

Four separate information systems enable comprehensive monitoring of the HIV response: (1) a national surveillance system (notifiable diseases and exposure categories); (2) a system for laboratory tests (CD4 and viral load tests); (3) a medicines logistics control system (public and private antiretroviral dispensing); and (4) a national information system (death registration).

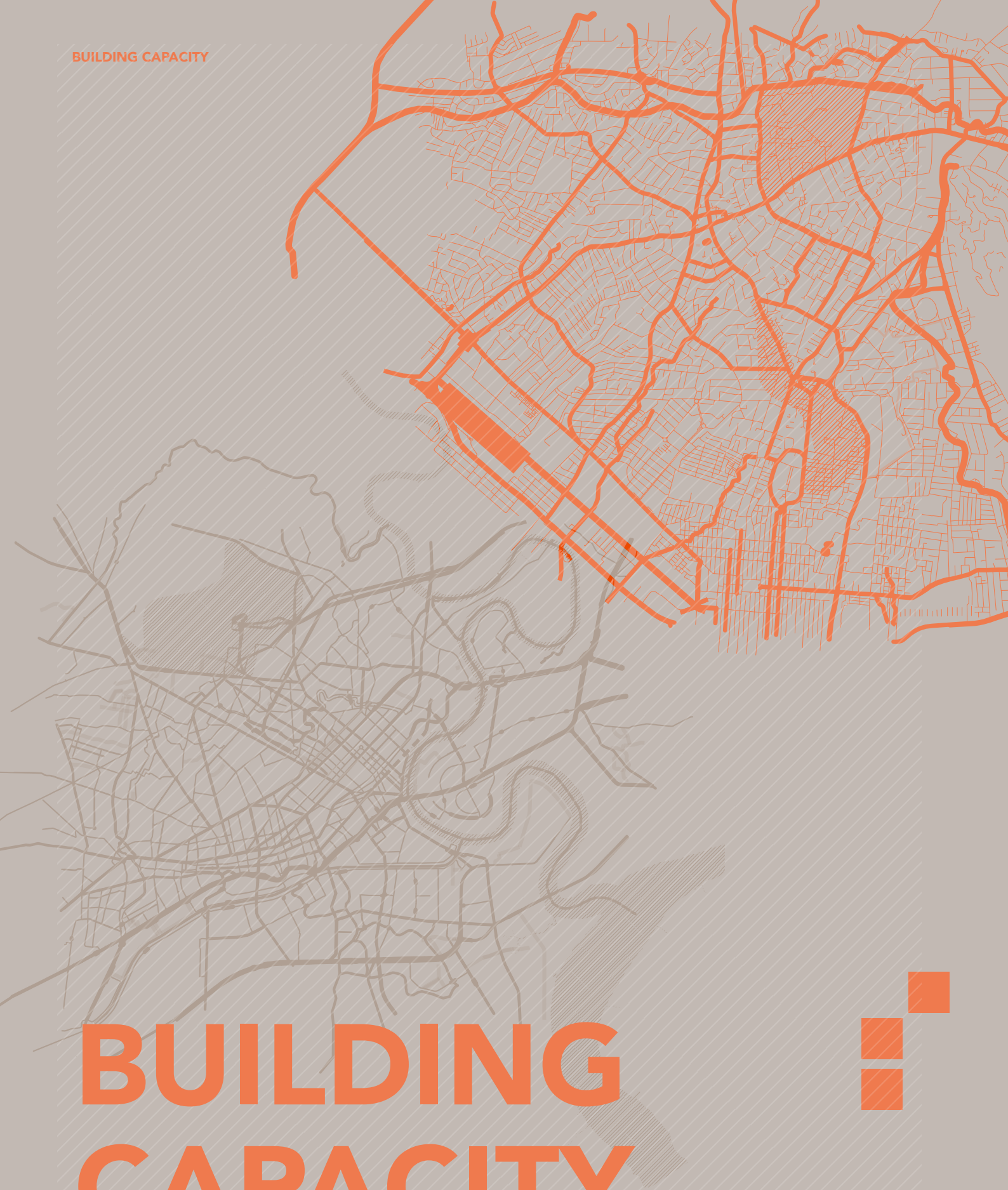
Together, these systems provide a complete picture of HIV at the national, state and municipality levels. Quarterly reports and an annual analytical report cover basic indicators, such as late diagnosis, time to antiretroviral therapy initiation, numbers of people living with HIV on antiretroviral therapy, adherence, retention and viral suppression, all disaggregated by sex, age, years of education and location of residence.

Importantly, the monitoring system allows for a detailed analysis of progress and challenges. Progress for the country as a whole between 2009 and 2017 is illustrated by the following clinical indicators:

- Time between antiretroviral therapy eligibility and antiretroviral therapy initiation. The proportion of people on treatment who were initiated within one month of eligibility has increased from 29% to 49%.
- Time between linkage and antiretroviral therapy initiation according to CD4. This has improved from 656 to 38 days.
- Twelve-month retention on antiretroviral therapy. This has increased from 74% to 82% of people on antiretroviral therapy.
- Optimal adherence has improved from 65% to 70%.
- Durable viral suppression (<200 copies/mL). This has increased from 53% to 69% (39, 40).

Challenges

The Brazil Ministry of Health has made considerable progress in the clinical monitoring of people living with HIV. The treatment and care cascade is considered a tool to monitor specific steps of HIV care, and periodical monitoring is used to redirect and strengthen interventions already in place and to indicate the necessity of innovation *(41)*. In addition, quality control of data is regarded as essential.



BUILDING CAPACITY

Reaching 90–90–90 and other Fast-Track Targets will depend on having a sufficient number of trained health-care professionals and community members who are able to provide high-quality HIV services and care. To achieve this, both the services and the facilities in which they are provided must be free from all forms of stigma and discrimination. Building clinical capacity across the spectrum of health providers and communities is therefore fundamental to the Fast-Track cities initiative.

The Fast-Track cities initiative also supports capacity-building in several other areas, including the elimination of stigma and discrimination, the protection of human rights, the removal of laws affecting people living with HIV, and the use of peer education to inform vulnerable and marginalized people of their rights. In addition, it supports capacity-building for the collection, analysis, use and reporting of strategic information.

HIV-related stigma and discrimination in health-care settings is a serious barrier to care, deterring people from seeking services and adhering to treatment *(42, 43)*. Adolescents and key populations—such as gay men and other men who have sex with men, transgender people, sex workers, people who use drugs and migrants—are particularly affected. Health-care providers should be trained in the special needs of key populations, while key populations should be engaged in sensitivity training for health-care providers.

Examples shared in this report show that cities are investing in building the psychosocial skills of health-care providers to reduce stigma and discrimination and to provide quality and friendly services to key and affected populations. For example, Nairobi (discussed in an earlier chapter) revised health worker training for interacting with adolescents and young people and key populations with the support and input of the affected groups and peer populations. Ho Chi Minh City (described below) has piloted a novel training programme that tackles HIV-related stigma that is now being replicated in other Vietnamese sites.

Joint support from UNAIDS and IAPAC is currently provided to build capacity in 15 high-burden cities. These activities include a series of e-learning courses to enhance clinical skills for health-care workers and civil society organizations, and to address stigma and discrimination in health-care settings. The Kingston story described later in this chapter illustrates this important work.

Ho Chi Minh City: building capacity to tackle stigma and discrimination in the health system

Ho Chi Minh City is Viet Nam's commercial hub and most populous city, with a population of about 9 million people *(44)*. The city is home to an estimated 25% of people living with HIV in Viet Nam, although many come from neighbouring provinces. The city's HIV epidemic is concentrated among people who use drugs, female sex workers and gay men and other men who have sex with men: HIV prevalence among female sex workers and gay men and other men who have sex with men is estimated at 6% and 17%, respectively *(45)*.

Ho Chi Minh City joined the Fast-Track cities initiative in 2015. Since then, city authorities have shown a strong commitment to the HIV response, including efforts towards reaching the 90–90–90 targets. In 2017, Ho Chi Minh City reported that an estimated 86% of people living with HIV knew their status, and 76% of them were on HIV treatment. This is well above the national results.

Assessing the problem

City authorities have long recognized that HIV-related stigma is a significant barrier to service use, particularly for people living with HIV and for members of key populations. In 2016, Ho Chi Minh City committed to tackling this problem by building the capacity of health-care workers and fostering closer dialogue with the community of people living with HIV.

The first step was to conduct a survey to better understand the scope and nature of HIV-related stigma and discrimination in three health facilities. The survey showed high levels of fear and/or worry among health-care workers when taking care of patients living with HIV, as well as perceived experiences of discrimination among the patients themselves.

"The results of the survey conducted in my hospital showed that stigma and discrimination remain prevalent among our health-care workers," said Le Tien Dung, Vice Director of Pham Ngoc Thach Hospital. "Discriminatory acts and practices come from limited awareness and knowledge of HIV, HIV transmission or universal precautions" *(46)*.

Building capacity

The results of the first survey informed the development of a training programme that covered standard precautions and other aspects of caring for people living with HIV. The training used participatory tools and methods, including dialogue with exercises and story-telling sessions by members of the Viet Nam Network of People Living with HIV (VNP+). The training module was tested in one facility with co-trainers from community organizations before it was offered to selected staff from the three facilities. Health-care workers from the three facilities were then educated as trainers, and a training-of-trainers manual was developed.

A follow-up survey showed a significant improvement in stigmatizing and discriminatory attitudes; it also found greater knowledge and capacity among the trained health-care workers. "The training helped to improve health-care workers' understanding of these issues," said Dung *(46)*.

One hospital committed to learning the lessons of this study by developing a code of practice that provides guidance for health-care workers on nondiscriminatory behaviour. "The code of practice developed for my facility originated in actions proposed by health-care workers during the training," said Sam Nhu Ha Vu, the lead nurse at Pham Ngoc Thach hospital. "I think the code of practice will be very easily implemented and translated into routine practices here" *(47)*.

Critical to the success of the study was the participation of people living with HIV at all stages, from the baseline survey to the development of training materials. It was very much a learning experience for all participants. "Thanks to this initiative, the partnership between health-care workers and myself has greatly improved—we have much better mutual understanding," said Nguyen Anh Phong, the leader of VNP+. "With this project, doctors and other staff in the hospital have become more open, more responsive and receptive of community's role in providing care and support."

This pilot initiative was led by the Viet Nam Administration for HIV/AIDS Control (VAAC), Ho Chi Minh City Provincial AIDS Center, VNP+ and UNAIDS, with funding and technical support from UNAIDS, M·A·C AIDS Fund and the UN Delivering Results Together (DRT) Fund.

What happened next

The pilot initiative came to an end in 2017, but it informed the development of both a national plan to reduce HIV-related stigma and discrimination in health-care settings and a new Ministry of Health directive. The directive includes technical guidelines for planning and implementing interventions and for developing standard operating procedures to reduce stigma and discrimination at various levels of health facilities.

One hospital included in the study has further embraced the initiative, mobilizing additional resources to conduct training for all 300 nurses. The first training workshop will start later in 2019, integrating content on reducing HIV-related stigma and discrimination into a standard Ministry of Health training curriculum on basic health education and communication for nurses.

The model is being replicated in other high-burden provinces with support from different development partners. It also has the potential to benefit other countries in the region: in 2019, Ho Chi Minh City was able to share its experience as part of the multicountry Southeast Asia Stigma Reduction Quality Improvement Learning Network.

Kingston: building capacity through online mentoring and training

With around 670 000 people, Kingston and St Andrew is the most populous parish in the North-West Caribbean island of Jamaica. It is home to 9900 people living with HIV and accounts for 27% of the national HIV burden. The city also has the highest rate of new HIV infections, the highest HIV prevalence among STI clinic attendees and the second highest rate of deaths from AIDS-related illness of all parishes in the country *(48)*.

Jamaica has an HIV prevalence of 1.8%, rising to about 30% among gay men and other men who have sex with men and 51% among transgender women *(49)*. The epidemic in Kingston and St Andrew is concentrated among gay men and other men who have sex with men and other key populations, including transgender women, homeless people, inmates and female sex workers. Kingston and St Andrew's HIV testing and treatment targets in 2019 were estimated at 93–53–66 *(50, 51)*.

The mayor of Kingston endorsed the Paris Declaration in 2014. Since then, the Fast-Track city initiative has gained significant momentum. In support of achieving global HIV targets, the Jamaican Ministry of Health and Wellness has embarked on a comprehensive strategy to build the capacity of health-care workers and civil society organizations to scale up HIV services. This is supported by the International Training and Education Centre for Health (I-TECH), IAPAC, UNAIDS and other partners.

Assessing quality of care

A national quality of care survey was conducted in Jamaica in 2017. It included a review of medical records, a self-administered questionnaire for clinicians and a qualitative assessment for patients.

IAPAC is supporting an additional survey that specifically addresses the perceptions of people living with HIV about the quality of care that they receive in health-care facilities. Following Ethics Committee approval, 6000 people living with HIV in 15 cities (400 in each city) will be asked to participate. With support provided though the Joint UNAIDS–IAPAC Fast-Track cities project, the survey will be one of the most comprehensive to explore the perceptions of people living with HIV about the quality of care that they receive in their respective cities, including Kingston.

Customer service policy

The Ministry of Health and Wellness in Jamaica has established a customer service policy to develop and implement customer-oriented services across all of its health services. The objective of the policy is to improve health-care delivery by providing quality health care that uses best practice approaches. As part of the Joint UNAIDS–IAPAC Fast-Track cities project, IAPAC is supporting the formation of a customer service subcommittee that will conduct a review of

studies conducted and reports published by all stakeholders to identify the gaps and priorities within HIV service provision, including those related to stigma and discrimination.

Virtual training

In response to a request from the Ministry of Health, I-TECH has been providing virtual technical support and capacity-building in Jamaica through the ECHO Platform. This platform uses teleconferencing to link specialist teams with primary care clinicians at treatment sites in remote locations.[14] Weekly teaching sessions provide an opportunity for mentorship, as staff are able to receive advice on the management of challenging cases (such as unsuppressed viral load). The first ECHO programme in the Caribbean was established in January 2018, with the hub in Kingston.

Online, self-paced learning material complements the existing ECHO mentorship programme. IAPAC has produced a series of eight 30-minute training modules that are narrated and self-paced. These cover the following: HIV testing and linkage to care; antiretroviral therapy initiation; adherence and retention in care; PrEP and post-exposure prophylaxis (PEP); key populations; paediatric diagnosis and care; adolescent health; integrated management of HIV and noncommunicable diseases; and HIV and aging.

Selected modules have been adapted for consistency with the Jamaican HIV treatment guidelines. Two additional modules requested by the Ministry of Health are HIV and the Pharmacist and Quality Improvement: Theories and Methodologies for Jamaica.

IAPAC has also produced a three-module e-learning course on stigma elimination and a facility-level stigma assessment tool. A stigma mitigation workshop for facility managers and administrators will follow the e-learning course. Both sets of e-learning courses will be posted on Jamaica's ECHO training platform; they also will be accessible on computer tablets and smart TVs.

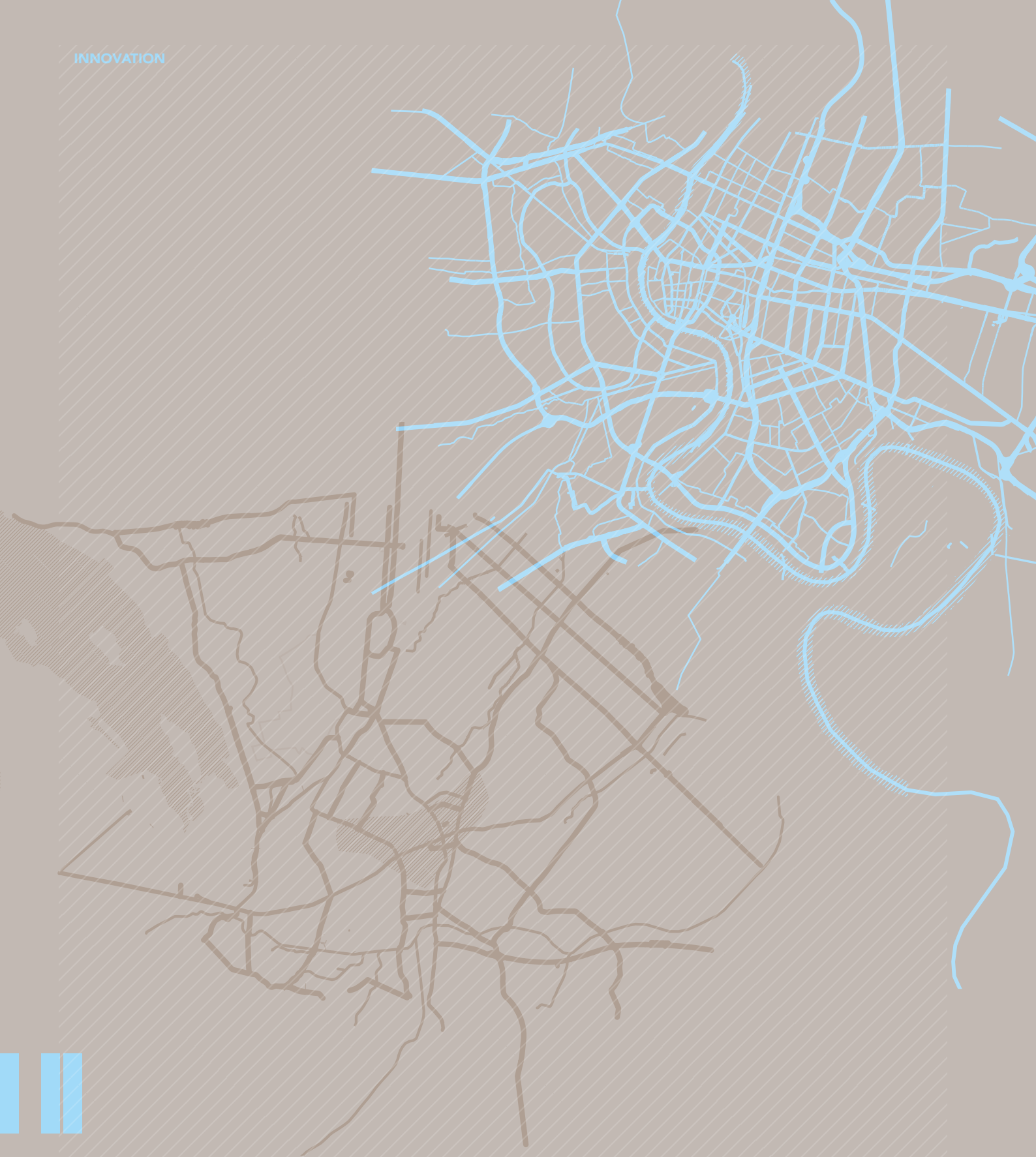
Community capacity-building

In collaboration with local and international community partners, IAPAC plans to implement a community capacity-building workshop. The curriculum for this workshop will include HIV treatment literacy, adherence, primary and secondary prevention, viral load testing and differentiated care. A second community capacity-building activity involves a stigma conversation map intervention that is centred around self-stigma and U = U.

Conclusion

The ECHO learning platform will be handed over to the Ministry of Health and Wellness to ensure its sustainability. Health-care workers will be motivated to make use of the training provided through the platform, as it will be linked to the requirement for Continued Medical Education (CME).

[14] In addition to clinicians, experts include social workers, psychologists and adherence counsellors.



II

INNOVATION

The history of the AIDS response has been a story of innovation across multiple domains, and it is innovation that has brought us into an era of optimism, one where strategies for ending AIDS are the topic of discussion in countries and cities across the globe. Despite this optimism, experiences from several Fast-Track cities demonstrate that in order to reach our goal of ending AIDS as a public health threat, new ideas and strategies are still needed to address gaps and reach populations that have been left behind.

Scientific innovation has transformed an HIV diagnosis from a death sentence to a condition that can be managed through consistent treatment and retention in care, and HIV treatment, when taken as prescribed, is currently the most effective option for preventing HIV transmission *(52)*. New biomedical prevention technologies developed in the past decade include PrEP, which reduces the risk of infection among HIV-negative people when they are exposed to the virus. Long-acting prevention tools that can be inserted, injected or implanted in the body are also in the pipeline *(53)*.

This chapter explores innovative approaches to strengthening HIV prevention and treatment at the programmatic level in four very different cities. The city of Bangkok (the Bangkok Metropolitan Administration or BMA) has embraced new approaches to treatment and prevention. Jakarta is strengthening its first 90 by using digital technology and artificial intelligence in the form of a chatbot to reach young people at higher risk of infection to provide information and encourage them to get tested. New Orleans is testing a new model for immediate treatment in community-based settings that is designed to support the second 90. Finally, San Francisco, with its mature epidemic, offers a model of care for older people living with HIV that has the potential to strengthen the third 90.

Bangkok Metropolitan Administration: partnerships for innovation

With a population of more than 8 million, the BMA is home to almost one third of all Thai people living with HIV, an estimated 77 000 people *(54)*.

Around seven out of 10 new HIV infections in the BMA occur among young people, particularly young men who have sex with men. Around 13% of gay men and other men who have sex with men are HIV-positive, compared with an HIV prevalence of under 1% among all BMA residents *(55)*. Other key populations that are particularly affected are people who inject drugs (17% prevalence), male sex workers (13% prevalence), transgender females (17% prevalence) and non-venue-based female sex workers (3% prevalence) *(56, 57)*.

Bangkok was one of the first cities to endorse the Paris Declaration, and it has made HIV one of its top priorities, achieving a great deal of progress in recent years. Overall, the percentage of people living with HIV in the BMA who know their HIV status increased from 66% in 2014 to 92% in 2018. In 2018, the testing and treatment targets were 92–78–76 *(58)*. This has led to a strong city focus on reaching the second 90.

Strength from partnerships

The BMA has long recognized the importance of partnerships to address HIV, particularly the key role of civil society organizations. In 2018, about 60% of the 4000 new HIV diagnoses among gay men and other men who have sex with men, transgender people and female sex workers were made by community-based services *(59)*.

Organizations led by key populations also are a critical part of the city's health system and integral to Fast-Track solutions to end AIDS. Recently, Thailand achieved a major milestone by amending a law to allow civil society organizations to be officially recognized as implementing partners in the health system. Private hospitals also are essential partners in the HIV response, as nearly half of all people living with HIV in Bangkok seek treatment in these facilities.

Strong partnerships have allowed the BMA to incorporate the latest science into programmes designed to reach the 90–90–90 targets. For example, the pioneering programmes and research of the Thai Red Cross AIDS Research Centre have provided valuable evidence for the design of the city's same-day antiretroviral therapy and PrEP, as well as services for gay men and other men who have sex with men and transgender people.

Other key partners in the city's HIV response are the Ministry of Public Health, the National Health Security Office (NHSO) and other line ministries, as well as UNAIDS, the United States President's Emergency Plan for AIDS Relief (PEPFAR), the Global Fund, academia and civil society organizations.

Innovations to expand access

The BMA has explored a range of interventions to expand access to HIV services. These are focused on the groups that are at higher risk of HIV exposure, such as gay men and other men who have sex with men and transgender people, and many are led by peers from those same population groups.

1. Pre-exposure prophylaxis.

   Bangkok was one of the first cities in Thailand to provide PrEP for key populations through community-led services, public hospitals, private clinics and BMA public health centres. Starting in 2015, the first PrEP demonstration project was conducted by key population-led partners, and the PrEP programme is currently being rolled out across the city's health facilities. In 2018, Bangkok accounted for almost 80% of all PrEP users throughout the country, and more than 90% of PrEP has been delivered by community- and key population-led services for gay men and other men who have sex with men, transgender people and sex workers. Various communication campaigns have aimed to increase the demand for PrEP among key populations. These campaigns use "health empowering" rather than "risk reduction" messages, and they are conducted via online social media, mobile road shows and outdoor signs.

2. Integrating services into primary health care.

   An important step in expanding access to HIV services was the October 2018 launch of the BMA ARV Service Centres. This involved the integration of HIV prevention and treatment into primary health-care settings, thus bringing services closer to people. Seven BMA primary health centres began to initiate antiretroviral therapy for newly diagnosed people living with HIV, while people already on treatment could be referred to 31 BMA primary health-care centres for medication refills, ongoing treatment, support and care. Fifteen BMA primary health-care centres provide PrEP services for key populations and nonoccupational PEP. Free and after-hour services are also available in eight primary health centres.

   In addition, all of the city's 68 primary health centres have integrated outreach programmes that provide counselling and testing for gay men and other men who have sex with men, transgender people, male and female sex workers, and other key populations.

3. Same-day antiretroviral therapy.

   The city is partnering with private hospitals and large government facilities to expand same-day antiretroviral therapy services to keep people living with HIV in the treatment and care system. Same-day services are available to all people who need them. Research has shown that 90% of those who tested positive accepted same-day antiretroviral therapy initiation, resulting in low loss-to-follow up and high rates of viral suppression *(60)*.

To ensure that no one is left behind, the governor of Bangkok approved an additional budget to provide antiretroviral therapy for undocumented migrants and non-Thai residents, and to supplement costs that are not reimbursed.

4. Tailored comprehensive services for specific populations.

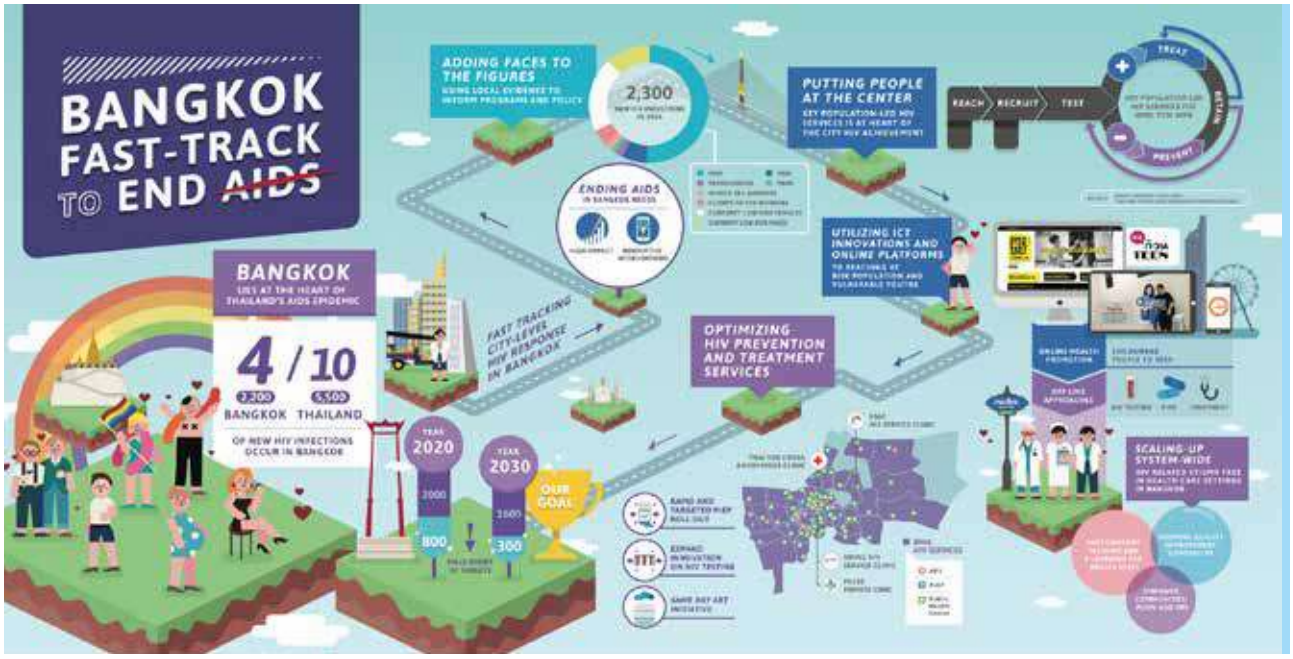
   Bangkok is providing strong support for key population-led services tailored to the needs of specific key populations. Model clinics for transgender people and gay men and other men who have sex with men have been pioneered by civil society organizations, and lessons learned have been shared. These services include using online platforms for health promotion that focuses on gay men and other men who have sex with men and on vulnerable youth.

5. Stigma reduction.

   The Bangkok Partnership for Zero Discrimination is a collaboration between the BMA, the Ministry of Public Health, UNAIDS, PEPFAR, civil society and key populations. It is committed to advancing the well-being and dignity of all groups. An important activity of the Partnership includes the training of health-care workers to provide appropriate and sensitive services. Later in 2019, the BMA will launch e-learning for health-care staff in selected hospitals.

Through this range of innovative strategies, Bangkok is making progress towards ending AIDS in the city. In the words of the Governor of Bangkok, Pol Gen Aswin Kwanmuang, on World AIDS Day 2018: "I strongly believe we must reach people being left behind. As part of our commitment, we expand HIV services and improve access to testing and treatment, through decentralized health units and community-based organizations. Catalysing innovation for people who need it most, pursuing integration and strong partnerships are at the heart of Bangkok's achievements."

Figure 8
Bangkok Fast-Track map



Source: BMA.

Jakarta: a digital innovation to reach young people

Jakarta is the capital of Indonesia and its largest city, with more than 10 million inhabitants. Of those, an estimated 110 000 are living with HIV. This represents 17% of the national HIV burden, making Jakarta the heart of Indonesia's HIV epidemic *(61)*. Current data for Jakarta suggest that around 54% of people living with HIV know their status, but only 35% of those are on treatment *(61)*.

In 2015, the governor of Jakarta signed the Paris Declaration and formally urged the mayors of the five Jakarta municipalities to develop their workplans and budgets in line with the Fast-Track Targets *(62)*.

HIV prevalence in Indonesia is highest among young people aged 15–24 years: they account for more than half of all new infections. At the same time, their knowledge of HIV is poor, with fewer than 15% of this age group having comprehensive knowledge of HIV *(63)*.

In Jakarta, young members of key populations such as sex workers, gay men and other men who have sex with men and people who inject drugs are most vulnerable to HIV. Despite this, many barriers hamper their access to HIV services. For instance, fear of stigma and discrimination in health-care settings discourages people from going to clinics for testing and counselling. For this reason, young people often prefer to be accompanied by outreach workers when visiting clinics, with community-friendly clinics becoming the preferred place for young key populations to access services.

Ask Marlo

HIV prevalence among young men under the age of 25 who have sex with men is estimated to be 24%, and incidence in this population has been increasing in recent years *(64)*. Although there are HIV clinics in Jakarta that provide antiretroviral therapy to young people, a key challenge for the city is to reach these young people with information on HIV and to increase the number who are accessing testing and counselling services.

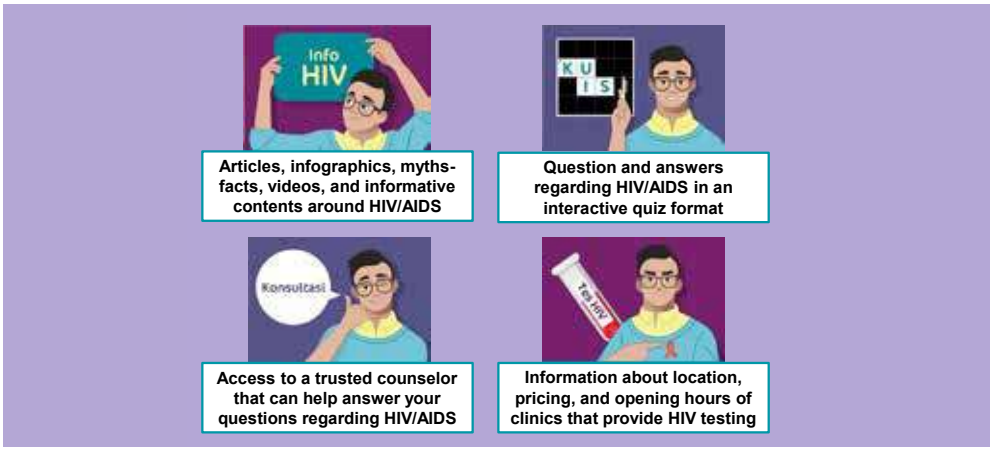
Research funded though the Fast-Track cities initiative showed that young men do not relate well to traditional HIV education, and that they would like information to be presented in more approachable and friendly formats, such as short articles, graphics and games *(65)*. The high levels of digital literacy in Jakarta suggested an innovative approach: the development of an interactive mobile application in the form of a chatbot, a virtual character that can simulate conversations using artificial intelligence technology.

With support from the Fast-Track cities initiative, the chatbot—Ask Marlo (or Tanya Marlo)—was integrated into the popular messaging application LINE, which is already widely used by Jakarta youth.[15] Marlo is a friendly character who speaks to young people using their everyday vocabulary, giving appropriate and confidential information and advice.

[15] "Tanya" means "ask" or "inquire" in Indonesian.

Ask Marlo has four main features: HIV Info, Quiz, Counselling and HIV Testing. HIV Info provides themed HIV information that is presented as short videos, infographics and factoids, while Counselling gives users the option to connect to a trained counsellor who can answer questions and offer emotional support. HIV Testing supplies a list of clinics in Jakarta that offer HIV testing services, even providing directions, pricing and opening hours; users can make a reservation to get tested at any of the eight clinics, with a confirmation sent by email.

Figure 9
Tanya Marlo's main features



Source: UNAIDS, Indonesia.

Ask Marlo was launched in December 2018 at a press conference attended by 21 journalists from prominent print and other media. This resulted in a large number of enthusiastic stories in print, online media and social media that have helped raise awareness of the service. Responses from young people have been encouraging, describing the chatbot as "so youth-friendly!" and a place where "we don't have to be ashamed to ask anything related to HIV" *(66)*.

By July 2019, seven months after its launch, Marlo had reached more than 3000 people with news and information and more than 400 with counselling and advice *(67)*. Monitoring and research shows that the Counselling feature is the most popular part of Ask Marlo, with around 50 users engaging with the counsellors every month *(68)*. The data also show that user numbers increased significantly with media and social media exposure, particularly posts on Instagram and Facebook.

One advantage of this approach to HIV education is that the platform provides ongoing learning, which in turn helps improve the chatbot's ability to reach the desired population. For example, users have taught Marlo interesting keywords that were previously unknown, and these can now be integrated into new content.

A chatbot like Marlo is high-maintenance and requires constant attention, updates and improvements. In a digitally sophisticated environment, however, the results are potentially significant, and large numbers of people can be reached. The Indonesian Ministry of Health has expressed strong support for Ask Marlo, and there is discussion about expanding Marlo to other Indonesian cities and adapting the technology for use in other settings.

New Orleans: immediate antiretroviral therapy in a community-based clinic

The majority (92%) of new HIV diagnoses in the United States occur in 25% of counties, with the southern states disproportionately affected. Three cities—Baton Rouge, Miami and New Orleans—have the highest rates of new HIV diagnoses in the country. The greater New Orleans area, with a population of nearly 800 000 people, has an estimated 7000 people living with HIV *(69, 70)*. The mayor of New Orleans is committed to accelerating the HIV response and signed the Paris Declaration in April 2016.

HIV transmission in the city occurs mainly among gay men and other men who have sex with men, and men of colour are at particularly high risk. Nearly 80% of new HIV diagnoses between 2013 and 2017 were among men; of those, nearly 70% were among gay men and other men who have sex with men. While HIV treatment and prevention services are available across the city, the testing and treatment targets are 87–66–97, which suggests that there is still some way to go to reach the agreed targets *(71)*.

Health experts in New Orleans have recognized that the city's HIV epidemic needs to be urgently addressed. Key to this is the provision of antiretroviral treatment and the attainment of viral suppression, both for the health benefit of the patient and to prevent further transmission of HIV. Same-day or rapid-start antiretroviral treatment has been effective in getting people living with HIV in care and achieving viral suppression, and there was a need to demonstrate that this approach could be successful in community-based clinics.

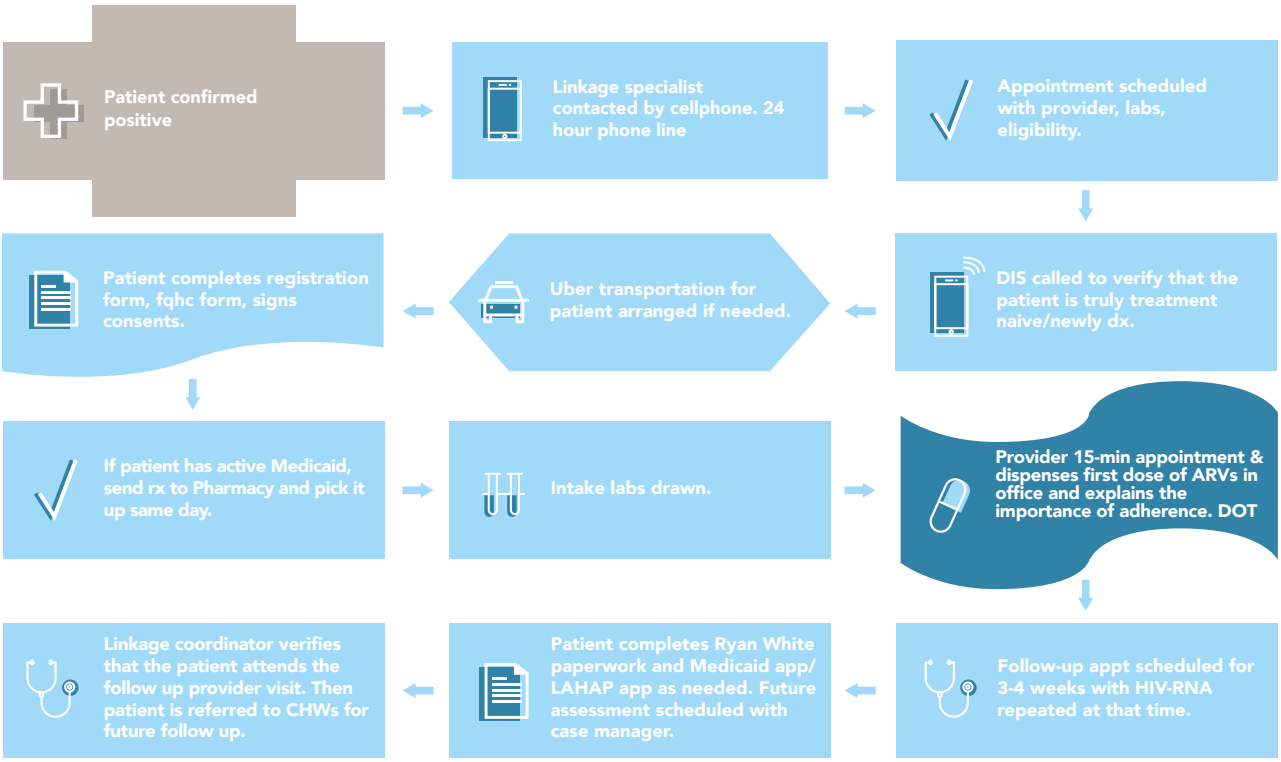
CrescentCare Start Initiative

CrescentCare began as an AIDS service organization in 1985, specializing in care for people living with HIV in New Orleans. It provides free HIV and STI testing, linkage to care and other services (such as PrEP and mental health services). CrescentCare became a federally qualified health centre (FQHC) in 2016, and it is now part of the state-funded national network of community-based facilities.

In December 2016, CrescentCare launched a rapid start program. It included two cohorts: the CrescentCare Start Initiative and Early Intervention Services. The CrescentCare Start Initiative linked patients to care and provided antiretroviral therapy within 72 hours, preferably on the same day of diagnosis. Early Intervention Services followed the same protocol for people who were initiating treatment for the first time after 72 hours (with a median of 6 months). They were contacted by the clinic for a first appointment.

In both instances, a coordinator was available 24 hours per day to coordinate the linkage of new diagnoses to care, while the intake process was streamlined to include a focused HIV visit with a treatment provider. An initial visit lasted about 30 minutes, the first dose of antiretroviral therapy was directly observed, and medication for the first 30 days was supplied.

Figure 10
Continuum of care flow chart



Source: Halperin J. CrescentCare Start Initiative: an intervention to end the epidemic. Fast-Track cities regional workshop, Atlanta; June 2018.

Improved outcomes

To understand the effectiveness of this approach, outcomes were analysed and the continua of care for both cohorts were compared.

A total of 207 patients were followed between December 2016 and April 2018: 136 in the CrescentCare Start Initiative and 71 in the Early Intervention Services. In both cases, about half of the patients were gay men and other men who have sex with men. Around 63% of the CrescentCare Start Initiative group were linked to care within 24 hours of their diagnosis. Viral suppression for those still enrolled in treatment at least one year from linkage was significantly higher in the CrescentCare Start Initiative group (93%) than the Early Intervention Services group (83%). Those in the Early Intervention Services group who were linked to care later also had a lower CD4 count and a higher rate of diagnosed mental illness.

Retention in care was significantly better in the CrescentCare Start Initiative intervention group. It was suggested that this could be explained by: (a) differences in motivation between the two groups; (b) the strong relationship that develops between provider and patient on the day the patient is diagnosed with HIV, starts on antiretroviral therapy and receives counselling on improved health outcomes; or (c) the understanding that U = U *(72)*.

The experience of the CrescentCare Start Initiative suggests that a rapid-start antiretroviral therapy model works well in qualified health centres that have extended hours and same-day appointments, and that it presents an opportunity to improve treatment outcomes in similar community settings. Success, however, depends on the availability of a full-time linkage coordinator and the incorporation of a 30-day treatment pack. Provider commitment to this model of care, including flexible scheduling and options for funding access to antiretroviral therapy, is also essential.

San Francisco: caring for older people living with HIV

San Francisco, on the West coast of the United States, has around 884 000 residents and is home to 16 000 people living with HIV *(73)*. The epidemic is largely concentrated among key populations, with gay men and other men who have sex with men accounting for 74% of new diagnoses annually *(74)*. Strong leadership and community engagement have resulted in state-of-the-art HIV services, and new HIV diagnoses in the city fell from 458 in 2012 to 221 in 2017. The city is also in reach of global treatment goals, at 94–79–94 *(73)*.

In the 1980s, San Francisco was one of the first cities to feel the full impact of the HIV epidemic. More recently, it has also witnessed the transformation of HIV from a fatal disease to a chronic one: currently, 60% of all people living with HIV in the city are over the age of 50 years, and 25% are aged 65 or older *(75)*.

Aging with HIV

Although the provision of treatment and care has been very successful, there are new challenges. Adults living with HIV are at increased risk for other conditions, such as cardiovascular disease, osteoporosis, renal disease and certain cancers; this often results in the need for multiple treatments *(76–79)*. Older adults living with HIV also experience geriatric conditions, such as falls and frailty, at relatively younger ages than people who do not have HIV *(80, 81)*. In addition, older adults living with HIV often are from marginalized populations and are dealing with mental health conditions and psychosocial issues, such as loneliness, substance use and related stigmas *(82–84)*. HIV care models for those aging with HIV therefore need to expand their focus beyond virologic suppression to improving quality of life and providing care for comorbidities. Merging principles from both geriatric and HIV fields have been proposed as a way of developing new and holistic models of care for people aging with HIV *(85, 86)*.

Ward 86 clinic

San Francisco General Hospital's Ward 86 has a tradition of leading and innovating in HIV care since it first opened its doors in 1983. This includes research that led to the use of universal antiretroviral therapy in 2010, starting a PrEP programme in 2013 and making the rapid start of antiretroviral therapy (on day of diagnosis) the standard of care since 2012. It also developed a new programme for homeless patients in 2019.

Ward 86 offers a comprehensive range of medical and psychosocial services to approximately 2600 low-income and uninsured HIV-positive patients throughout San Francisco. Of these patients, more than 1200 are aged 50 years or older. The clinic already has a structure of multidisciplinary provision of care that provides an ideal foundation for a new model of care for its aging population, and in 2017, the clinic developed a comprehensive care programme known as the Golden Compass to address their needs.

The Golden Compass program

Staff at the clinic designed the Golden Compass programme on HIV and aging with input from patients and providers *(87)*. The name of the programme came from ideas raised in focus group discussions with patients: "golden years" was the acceptable term for aging across all groups, and many participants indicated that they needed further guidance on how to navigate their care. The Golden Compass concept is

therefore structured around helping people living with HIV navigate their golden years, with each compass point focused on a specific challenge facing this population:

- Heart and mind (North): on-site cardiology, cognitive evaluations and brain health classes.
- Bones and strength (East): bone health, fitness and physical function, including exercise and wellness classes and on-site geriatric consultation.
- Dental, hearing and vision (West): appropriate screenings and linkage to services.
- Networking and navigation (South): social and community-building activities, including a storytelling class for participants.

Participants keep their primary care provider, but they also have access to on-site, HIV-focused specialty care from a geriatrician and cardiologist, in addition to other programmes.

Evaluation

The Golden Compass programme at Ward 86 was launched in January 2017. An evaluation after the first 18 months showed that 220 patients had participated in at least one part of the programme. Through surveys and interviews with patients and primary care providers, the evaluation found that patients, providers and staff were highly satisfied with the program: more than 90% reported that they were "satisfied" or "very satisfied" with it. Similarly, 90% of staff and providers felt the programme had improved the health of older adults at Ward 86. Overall, both patients and providers found the programme highly acceptable (96%), although providers did note that patients, especially those in their 50s, did not like to discuss aging.

With regard to specific services, more than 90% of providers expressed satisfaction with the cardiology and geriatrics clinics, noting improvements in patient care and consultations. Services to address problems related to multiple medications and mobility also were valuable for both patients and providers: participants reported improvements in their balance, posture and mental health from the exercise classes, and many participants also indicated that they formed new connections with other patients during these classes.

In one example, a man in his mid-60s who had been living with HIV for a number of years noted a number of benefits from the focused programming of the Golden Compass. His dizziness resolved after his medications for blood pressure and prostate were adjusted, and he was better able to deal with feelings of grief and isolation. He also felt much better after being connected with a volunteer at a local community-based AIDS organization and making friends through the Golden Compass classes, and he noticed decreased stiffness from the exercise classes. Overall, he said, "I'm in a good place compared to how I was before I started in the program."

Expanding the reach

Work is ongoing to expand the reach of the programme to ensure that age-appropriate screenings for HIV and other geriatric conditions occur for all people over the age of 50. Alternative options for Golden Compass consultations—including e-consultations, telemedicine and other models—are also being explored. In addition, the clinic is developing training programmes on aging-related topics and assessments for staff and providers in order to reduce dependence on the geriatric consultant and to impart generalizable skills to a greater number of providers who are caring for the clinic's aging population.

URBAN LEADERS

Several cities have made significant progress in the HIV response, having already reached, or even exceeded, the 90–90–90 treatment targets. The number of new infections also has been falling. This chapter describes the achievements of four exemplary cities: Amsterdam, New York City, Melbourne and London.

These four cities have several features in common:

- Being situated in high-income countries with well-funded health systems, they share a similar socioeconomic status. This has enabled them to provide HIV services, particularly treatment and sustained care, to all who need it.
- While their epidemiological profiles differ, they are all in areas with a relatively low overall HIV burden, where HIV is concentrated among gay men and other men who have sex with men. Focused programming therefore makes it easier for them to reach the first 90.
- Decades of activism and community engagement in these cities have also created an enabling environment for an effective response.

All four cities can attribute their success to the full use of available HIV prevention tools, including traditional programmes (such as condom use) and new biomedical prevention interventions (such as treatment as prevention and PrEP). They have also benefited from ambitious and creative communication campaigns that have focused on key populations.

At the same time, the four cities have developed unique approaches to identifying and addressing challenges and weak points in their treatment and prevention cascades. Amsterdam has developed a strategy to identify people with acute HIV infection and Fast-Track them to treatment. New York City's Status Neutral Prevention and Treatment Cycle highlights opportunities for prevention and treatment while normalizing and destigmatizing both. Melbourne uses the strength of civil society organizations and is combining peer-led campaigns with state-of-the art treatment programmes, while London uses ongoing and detailed monitoring to scale up effective prevention strategies and ensure that universal treatment is available through its National Health Service (NHS).

Amsterdam: bridging the 5–6–6 gap

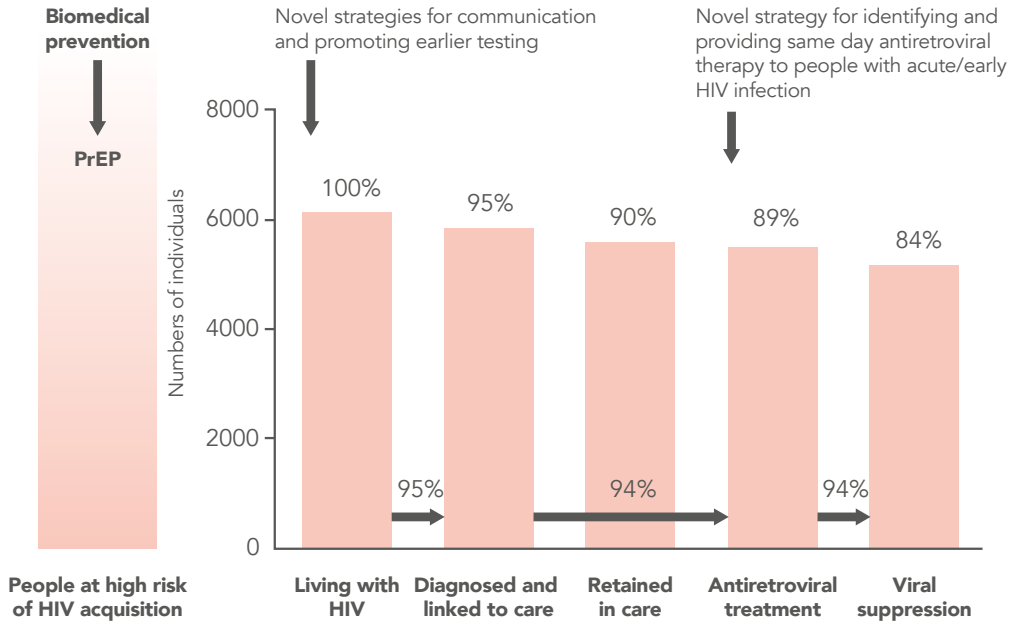
Amsterdam, the capital of the Netherlands and the country's most densely populated city, has a population of more than 800 000, of whom an estimated 6170 are living with HIV—more than one quarter of all people living with HIV in the country *(88, 89)*.

Amsterdam was one of the first cities in the world to reach, and then exceed, global HIV diagnosis and treatment targets, achieving testing and treatment targets of 95–94–94 at the end of 2017 *(90)*.

Despite these extensive and effective interventions, an estimated 5% of people living with HIV remain unaware that they are infected, and a small number of new infections continue to occur. A particular challenge includes ongoing HIV transmission during the early stage of infection *(91)*. Another challenge is reducing the large proportion of people (32%) who are diagnosed when they already have advanced HIV infection.

HIV Transmission Elimination Amsterdam (H-TEAM) was launched in 2014 with the goal of developing and implementing innovative strategies to bridge the remaining gaps in the HIV response. A unique collaboration of key HIV stakeholders in the city working in multidisciplinary and interdisciplinary teams, H-TEAM includes representatives from affected communities in its efforts to reduce HIV incidence and improve the prognosis of people living with HIV by

Figure 11
Various entry points for H-TEAM interventions addressing remaining gaps in HIV prevention, and within the care cascade of the estimated total population of people living with HIV in Amsterdam by the end of 2017



Source: H-TEAM, Amsterdam.

implementing various new strategies. This includes the provision of PrEP and various novel means of promoting earlier testing, with a focus on identifying and providing immediate treatment to all people living with HIV, including those with early or acute HIV infection.

The initiative combines research with practice, and until now, it has focused on the two main groups at high risk of HIV in Amsterdam: gay men and other men who have sex with men and migrants from regions with a high HIV prevalence. Since the start of H-TEAM, several projects have addressed specific gaps in the prevention and care cascade.

Biomedical prevention

To reduce HIV incidence, tailored sexual health services for gay men and other men who have sex with men and transgender people need to include PrEP alongside STI testing and treatment. In 2015, H-TEAM started AMPrEP, a demonstration project for 376 HIV-negative gay men and other men who have sex with men and transgender people. Its goal was to assess: (a) the uptake of (and experience with) daily or event-driven PrEP; (b) changes in sexual risk behaviour; (c) incidence of STI and HIV; (d) adherence to PrEP; and (e) overall cost-effectiveness *(92)*.

During the AMPrEP study, which is the first demonstration study to offer participants the choice between daily and event-driven PrEP use, HIV incidence has remained very low, with no evidence of an increase in STI incidence over time among both daily and event-driven PrEP users *(93)*. These data—and other results from the AMPrEP project—have provided the Health Council with guidance on how to supply PrEP within the Dutch public health system.

Finding the 5% who are unaware of their status

H-TEAM is working with the Amsterdam Health Technology Institute on a mapping project that aims to trace people living with HIV who are unaware of their status. Using a range of data sources, they have been able to estimate where current and future infections are likely to occur, and they can identify, by postal code, neighbourhoods where the risk of HIV exposure is higher. Early results show that HIV prevalence varies from 0.17% to 2.27% across the city *(94)*. These findings provide a starting point for a geographically targeted approach to HIV testing and other interventions.

Focused awareness

Several awareness-raising campaigns aimed at gay men and other men who have sex with men have focused on barriers to the uptake of testing, prevention, early treatment and retention in care.

The campaign Do I Have HIV?, launched in 2015, raised awareness of the symptoms of acute HIV infection by means of posters, flyers, and online and offline media that focused on gay men and other men who have sex with men. A dedicated website offers information and provides a symptom checker for men who may recently have been at risk for HIV. By May 2018, the website had been

visited more than 204 000 times, and the symptom checker had been completed more than 117 000 times *(95)*. Of the 371 men who visited the Public Health Service of Amsterdam for an acute HIV infection test, 30 were diagnosed as HIV-positive; of those, 24 were in the acute stage of HIV infection *(96)*.

A second campaign (Laatjesneltesten, which roughly translates as "Test Rapidly") is running through 2017 and 2018. Focusing on the importance of rapid HIV treatment and rapid testing, it aims to alleviate fears of a positive test result by emphasizing how HIV will only have a limited effect on a person's future life. A third campaign (HIV as a Chronic Disease) involves studies to assess perceptions related to HIV as a chronic disease, followed by a second phase that addresses knowledge gaps that are identified.[16]

Two studies have examined perceptions and understanding of living with HIV among both HIV-negative and HIV-positive gay men and other men who have sex with men. A planned communications campaign based on the two studies will address knowledge gaps of both groups.

Faster and more frequent testing

Among health professionals and specific target groups, H-TEAM promotes the importance of early testing by raising awareness of the potential early symptoms of acute or early HIV infection. One innovation includes an approach to identifying those at risk of acute HIV infection during the time interval when the infection may be missed by standard testing algorithms. Point-of-care RNA testing is being used to identify the virus as early as seven days after infection. Those identified as having acute HIV infection are offered immediate start of treatment.

The acute HIV infection testing strategy involves the use of a risk score for possible acute HIV infection that weighs symptoms in combination with sexual risk behaviour. The four symptoms are oral thrush, fever, swollen lymph nodes and weight loss; the three risk factors (all within the preceding six months) are self-reported gonorrhoea, receptive condomless anal sex, and more than five sexual partners. This risk score was implemented as an interactive online screening tool for individual gay men and other men who have sex with men through the dedicated website, and for health-care providers at the STI clinic of the Public Health Service of Amsterdam. A study showed that screening for acute HIV infection with four symptoms and three risk factors would increase the efficiency of acute HIV infection testing, potentially enhancing early diagnosis and immediate treatment *(97)*.

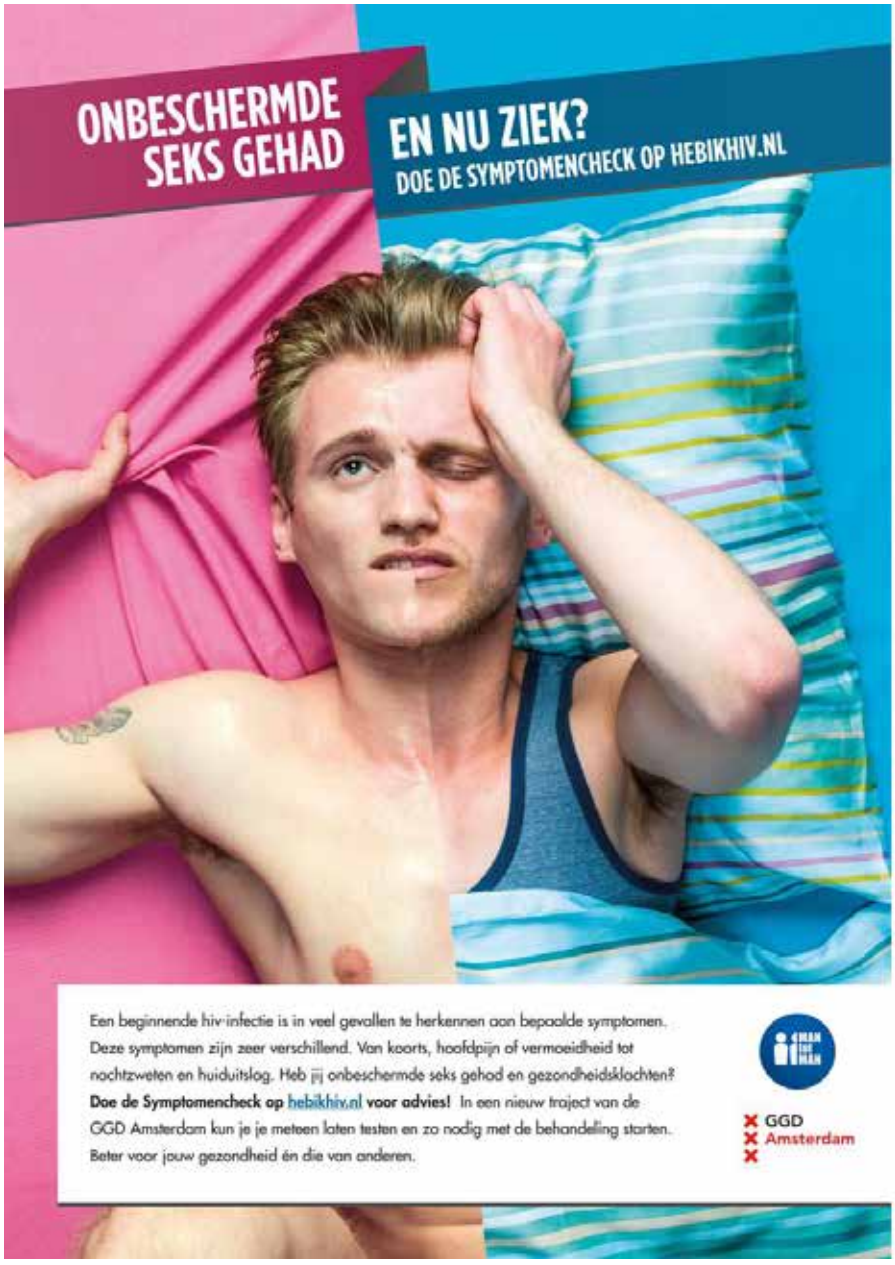
Improved care trajectory for those with acute or early HIV infection

The H-TEAM acute HIV infection testing strategy ensures that newly diagnosed people with acute HIV infection receive immediate treatment. A research paper presented at the International AIDS Society Conference in July 2019 showed that the implementation of the strategy with immediate treatment resulted in an HIV

[16] For more information, please visit the H-TEAM website: https://hteam.nl/awareness-raiing-and-treatment/?lang=en

positivity rate of almost 8% in men who were tested for acute HIV infection, and that it reduced the time from diagnosis to viral suppression to as little as 55 days in those with documented acute or early HIV infection *(98)*.

H-TEAM is a unique collaboration at the forefront of global HIV implementation research. While its model may be most relevant to high-income countries with a low HIV burden, its experience also has the potential to help Fast-Track the HIV response in cities around the globe.



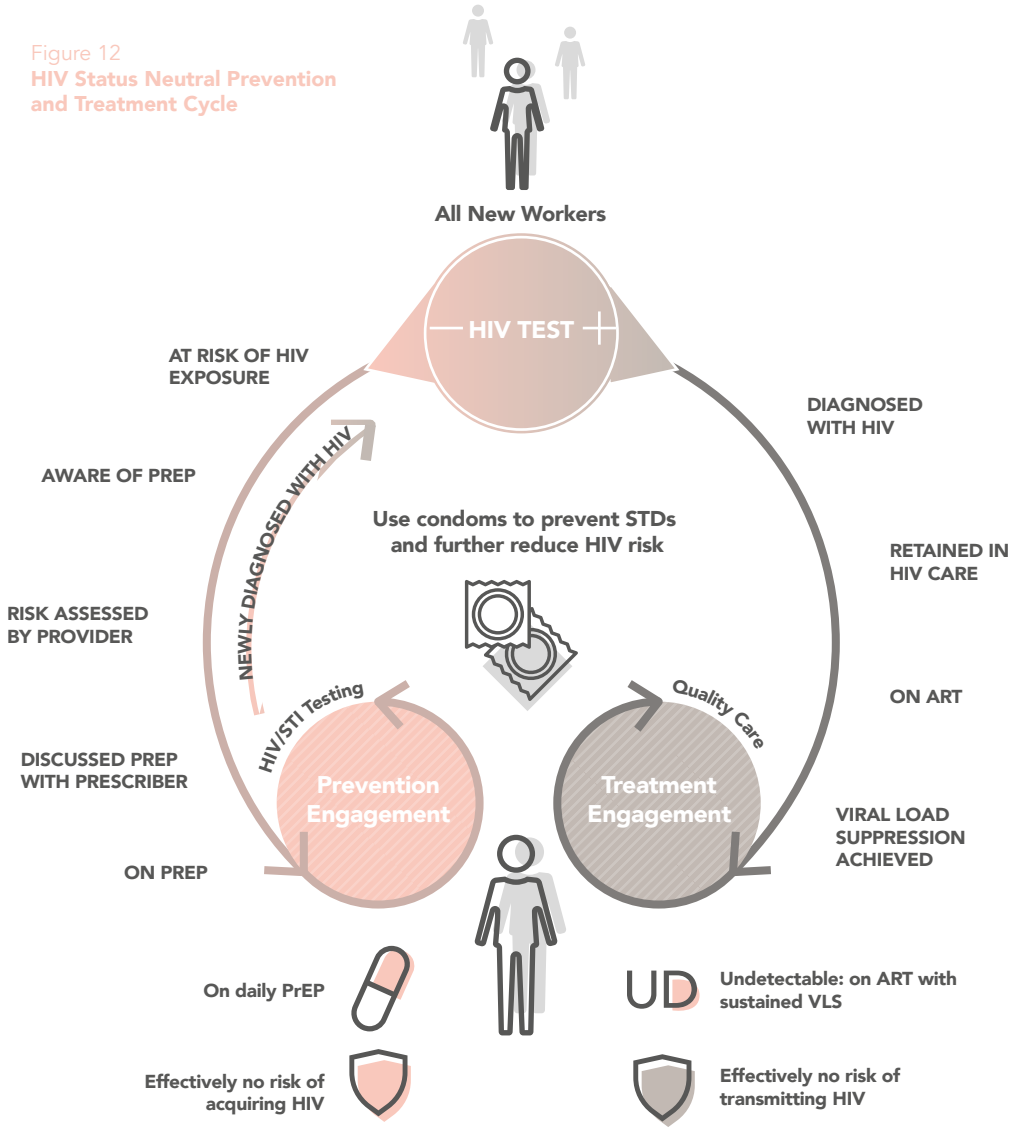
H-TEAM: Acute HIV infection, symptom checker. Available at https://www.hebikhiv.nl.
Credit: H-TEAM, Amsterdam.

New York City: Status Neutral!

New York City is the most populous city in the United States, with more than 8.3 million residents. As of December 2017, there were an estimated 90 500 people living with HIV in the city, and 2160 people were newly diagnosed with HIV in 2017 *(99)*. Nearly 60% of new HIV diagnoses in 2017 were among gay men and other men who have sex with men.

Since the beginning of the epidemic, New York City has been a leader in the AIDS response. Between 2007 and 2017, the number of new HIV diagnoses fell by nearly 50% (from 4250 in 2007 to 2160 in 2017), and viral suppression within six months of HIV diagnosis increased from 45% in 2013 to 64% in 2017 *(99)*. In 2015, there was no reported perinatal HIV transmission to children born to HIV-positive mothers *(99)*.

Figure 12
HIV Status Neutral Prevention and Treatment Cycle



Source: New York City Health Department.

New York City is now one of the few cities in reach of the global treatment targets, at 93–86–93 *(100)*.

The city's success is due in large part to collaborative and evidence-informed efforts between city health authorities, civil society organizations and health-care providers. This strategy was formalized in 2014, when the State of New York announced its plan to end the AIDS epidemic by 2020 *(101)*. The state's three-point plan is focused on: (1) identifying people with HIV and linking them to care; (2) retaining people diagnosed with HIV in care to achieve and maintain viral suppression; and (3) facilitating access to both PEP and PrEP *(102)*.

Status Neutral

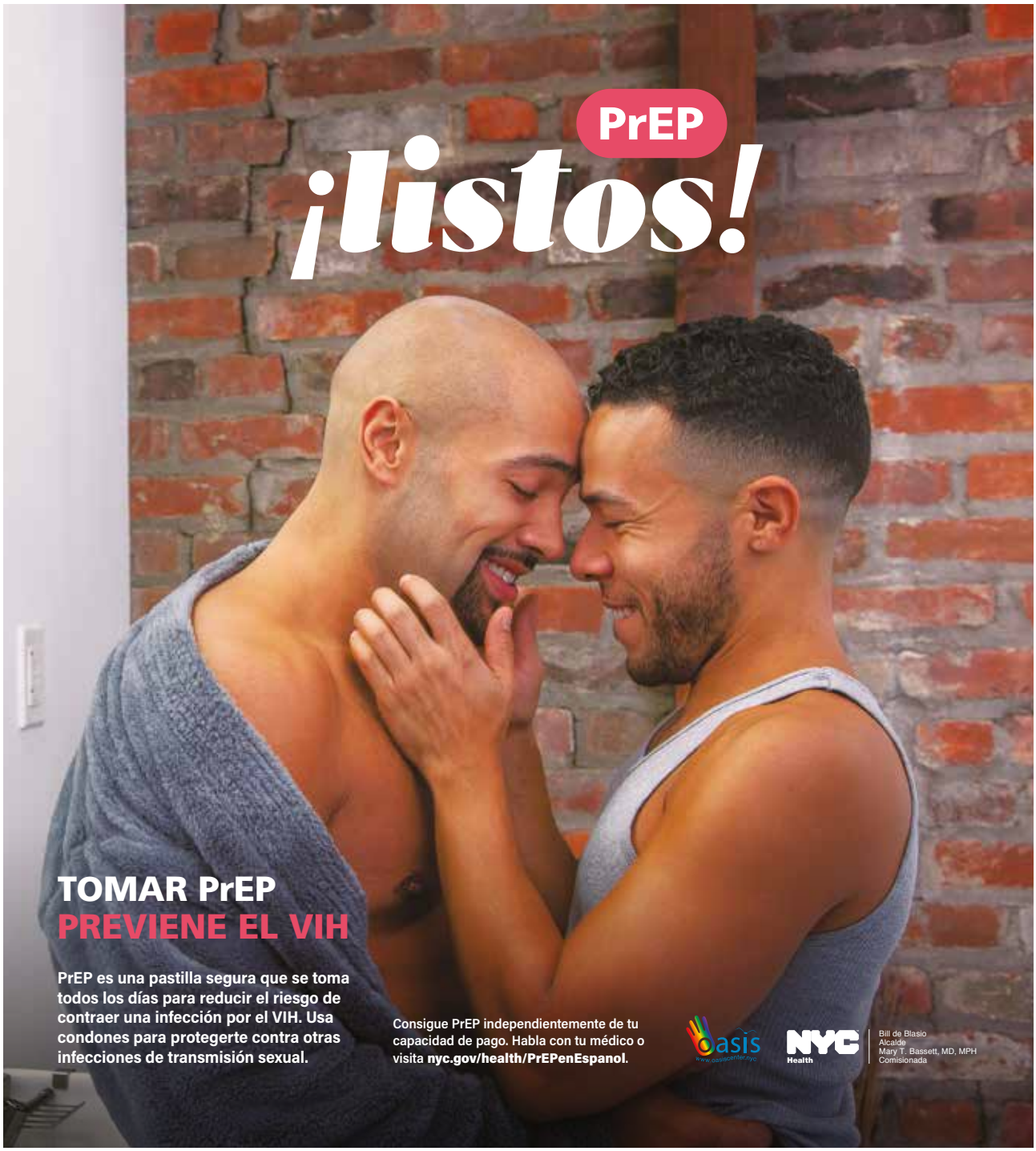
The New York City Health Department has also pioneered a new paradigm to strengthen HIV programming: the HIV Status Neutral Prevention and Treatment Cycle. This cycle—which links treatment and prevention in an approach that normalizes both treatment and prevention services and aims to destigmatize both—outlines steps that can lead to an undetectable viral load or to effective prevention, showing options for both HIV-positive and HIV-negative people to keep themselves and their partners healthy *(103)*.

As with the traditional care continuum, the first step in the Status Neutral Prevention and Treatment Cycle is HIV testing: its goal is ensuring that all New Yorkers know their HIV status. Once the result of the test is known, the cycle proposes one of two paths that will ultimately result in engagement in clinical care: people who test negative can take steps to prevent HIV, including taking PrEP and using condoms, while people who test positive can take steps to protect their health, including starting and staying on treatment to achieve and maintain viral suppression. This, in turn, should lead to a normal healthy life with effectively no risk of transmitting HIV.

Strengthening care and prevention services

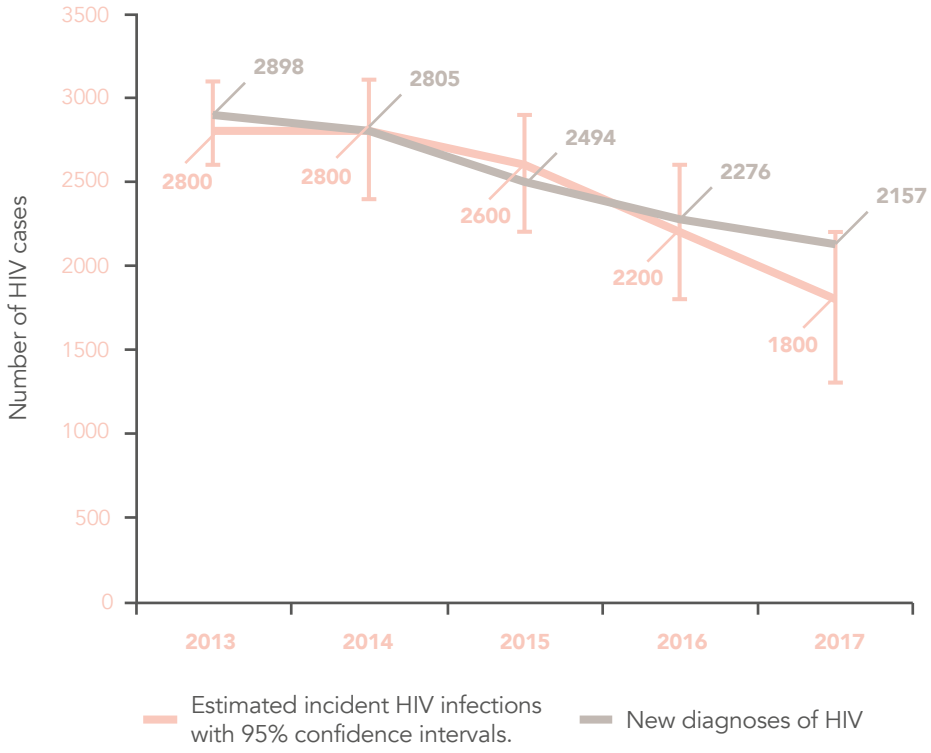
Central to New York City's approach to HIV prevention is providing and promoting high-quality care for its residents. This includes transforming and rebranding the city's eight STI clinics into welcoming, culturally competent sexual health clinics, and promoting the citywide PlaySure network of testing sites, community-based organizations and clinics. This network provides tailored approaches to sexual health and HIV services that include PrEP, PEP Centers of Excellence, a 24-hour PEP hotline and adolescent-friendly clinics. Additionally, the city's sexual health campaigns are designed to increase awareness and uptake of services; they include messaging tailored to reach New York City's diverse priority populations. Optimal treatment for people living with HIV includes linking newly diagnosed people to services where they are immediately initiated onto antiretroviral therapy. The Undetectables campaign provides user-friendly support for people living with HIV via web-based materials and social media, and it promotes the evidence that U = U.

The concerted efforts of New York City stakeholders have had positive results. The city is diagnosing HIV infections earlier, and new diagnoses are rapidly declining (Figure 13). This innovative approach is ensuring that New York City is on track to meet its 2020 targets, and it provides a model for other countries.



New York City PrEP campaign
Credit: New York City.

Figure 13
New HIV diagnoses and incidence estimates, New York City, 2013 to 2017



Source: HIV surveillance annual report, 2017. New York (NY): New York City Department of Health and Mental Hygiene; 2018.

Melbourne, Victoria: building on a rich legacy

With around 5 million residents, Melbourne is the second most populous city in Australia and home to the majority of citizens of the state of Victoria. There are approximately 7360 people living with HIV in Victoria, with the majority of them (85%) living in Melbourne *(104)*.[17]

Sexual transmission of HIV among gay men and other men who have sex with men accounts for the bulk of new HIV infections, but transmission through heterosexual sex is slowly increasing. In 2016, HIV prevalence in Victoria was 0.13% in the general population, 7.3% among gay men and other men who have sex with men, and 1.4% among people who inject drugs. In the same year, 73% of new HIV transmissions were among gay men and other men who have sex with men *(105)*.

Annual rates of new HIV infections in Victoria have dropped from a peak of more than 500 cases in 1985 to an average of 307 cases per year since 2012 *(105)*. By the time Melbourne endorsed the Paris Declaration in 2015, it was already approaching the global treatment goals; in 2017, it had achieved testing and treatment targets of 89–98–98 *(106)*.

The success of Melbourne's response can be attributed to the enabling environment created by four decades of community and government engagement, and a consistent and comprehensive approach to HIV prevention and testing.

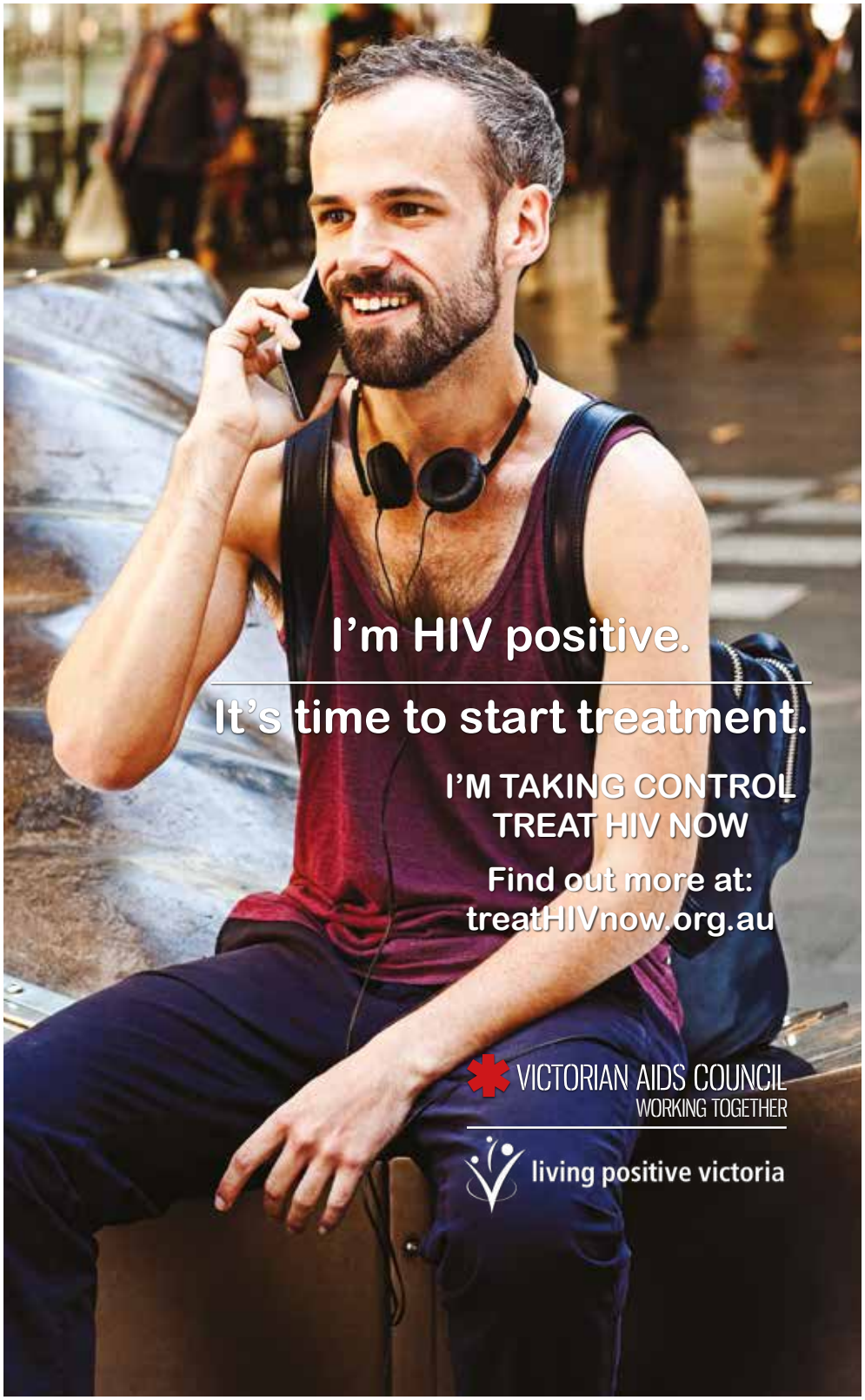
An enabling environment

Australia's bold and ambitious response to HIV began in the early 1980s, attracting bipartisan political support at all levels of government and galvanizing a partnership between political, community and scientific leaders. This partnership has driven the virtual elimination of mother-to-child HIV transmission and transmission among sex workers. Similarly, Victoria has successfully maintained a low incidence of HIV among indigenous peoples and people who inject drugs. Early adoption of funded needle–syringe programmes and other harm reduction programmes has been a hallmark of Australia's response.

In the first year of the epidemic in Melbourne, the Victorian AIDS Council (VAC) was established by civil society organizations as a focal point for services, campaigning and activism.[18] For over four decades, VAC drew on the city's experience of gay and sex worker activism and supported the development of HIV-focused groups, such as ACT UP Melbourne, Positive Women Victoria, Living Positive Victoria and others *(107)*. It has also reached out to those at increased risk of HIV exposure with comprehensive activities, including peer education, counselling, social support, health promotion and innovative media campaigns.

[17] Data in this section is for the state of Victoria rather than Melbourne. Please see: Melbourne/Victoria. In: Fast-Track Cities [Internet]. IAPAC; c2019 (http://www fast-trackcties.org/data-visualization, accessed 27 August 2019).

[18] VAC is now Thorne Harbour Health.



Material from the Victoria AIDS Council testing campaign.
Credit: Victoria AIDS Council.

While many of the focus groups have now been disbanded, they have been replaced by effective online activism, such as The Institute of Many (TIM), an online organization that offers advice and support for people living with HIV, campaigning around U = U. Two PrEP activist groups (PrEPaccessNOW and PrEP'd for Change) have recently played an important role in creating awareness of PrEP, providing information about it and helping to create demand.[19]

Victoria's HIV response is underpinned by a model of care that is designed and delivered in partnership with government, civil society, affected communities, and clinicians and researchers. A recent development has been the establishment of a clinical care network that brings together leadership from all the major community and clinical services to discuss issues such as service access, retention in care, education levels and training needs of medical professionals.

Since 2015, the universal health-care system has offered treatment for free or at low cost to all people living with HIV, regardless of CD4 count. HIV treatment in Melbourne is provided at five high caseload clinics for gay men and other men who have sex with men, or by general practices, hospitals and community health centres. High caseload clinics, which provide services to around half of all people living with HIV in the city, are staffed by clinicians and offer unique services, including rapid testing and the offer of immediate linkage to care *(108)*.

Prevention and testing

Victoria has benefited from the full range of prevention tools, including condoms, PrEP, PEP and treatment as prevention. The Victoria government was the first in the world to endorse the concept of U = U, and in April 2018, PrEP became part of the nationally subsidized medication scheme, which resulted in a 70% increase in PrEP users in Victoria in the first nine months. A state-based and state-funded trial of a model of community prescribing for PrEP (called PREP-X) predated the national scheme and provided critical leadership to the national program.

Key civil society organizations, clinical leaders and PrEP activist groups established the PrEP Accord to discuss issues arising among PrEP users and gaps in PrEP education, and to campaign for an expansion of PrEP services.

Alongside comprehensive prevention, expanded services and focused public health campaigns have improved testing rates.[20] Innovations here include Pronto!, a peer-led and community-based rapid testing service, and Test and Go, a nurse-led rapid HIV and sexual health testing service for gay men and other men who have sex with men. There is a strong culture of HIV testing among Melbourne's gay men and other men who have sex with men, with a recent survey showing that four out of five men had been tested for HIV in the past 12 months *(109)*.

[19] For more information, please see https://www.pan.org.au/ and https://www.prepforchange.com/.

[20] This includes condoms, PrEP, PEP and treatment as prevention, sometimes referred to as combination prevention.

In 2018, the #TestFestVic hackathon, supported by the Fast-Track cities initiative, generated innovative solutions to focus on groups at high risk of infection who do not usually access testing facilities or understand their risk of HIV.[21] This event included games and storytelling apps that are now under development.

Over the decades, exciting public health campaigns have focused on HIV and gay men and other men who have sex with men, reflecting the issues and challenges of the times. Contemporary campaigns emphasize combination prevention, such as the What Works campaign, which highlights the many ways that HIV transmission can be prevented (including PrEP, PEP, condom use and undetectable viral load). An online sexual health portal, Emen8, educates gay men and other men who have sex with men on HIV and STI prevention and treatment through a magazine format. It reached more than 26 000 users in its first year (July 2018 to June 2019) *(110)*.

Victoria has become a global leader in the HIV response, and the ambitious new goal of 95–95–95 by 2030 is now in sight. Key challenges to meeting this target include reaching populations at higher risk of infection in instances where testing and engagement in care is suboptimal, and strengthening the sexual health infrastructure to cope with the increase in testing and treatment due to the success of PrEP.

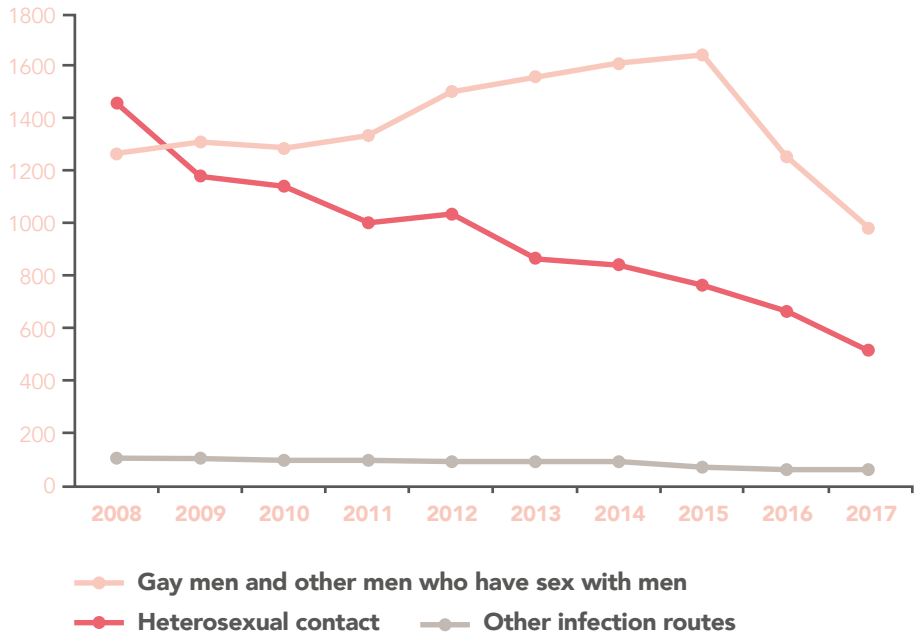
[21] The groups that were the subject of #TestFestVic were women under the age of 30, migrants, travellers and Australians with aboriginal or Torres Island backgrounds.

London: getting to zero

London, the capital of the United Kingdom, is the most populous city in western Europe, with a population of more than 8.7 million people. In 2017, an estimated 38 600 people were living with HIV in London—almost 40% of all people living with HIV in the United Kingdom *(111)*.

The overall HIV prevalence in the city is 0.57%, but it reaches 13.4% among gay men and other men who have sex with men. Sixty-three per cent of new HIV diagnoses in 2017 were among gay men and other men who have sex with men; only 33% of people who were newly diagnosed acquired HIV via heterosexual contact *(111)*.[22] London has recently seen a significant decrease in the number of people newly diagnosed as HIV-positive, with a 22% reduction in new infections among gay men and other men who have sex with men (Figure 14). However, this reduction is neither uniform across all population groups nor in all areas of the city, and although rates of late diagnosis are showing improvement, they remain stubbornly high at 35%.

Figure 14
New HIV diagnoses by probable exposure category, London residents, 2008 to 2017



Source: An annual epidemiological spotlight on HIV in London, 2017 data. London: Public Health England; 2018.

London is the first city in the world to exceed both the UNAIDS targets of 90–90–90 and 95–95–95, with 2017 figures confirmed at 95–98–97. In other words, 95% of Londoners living with HIV know their HIV status, 98% of people who know their HIV-positive status are accessing treatment and 97% of people on treatment have

[22] Among those aged 15–59 years.

suppressed viral loads *(112)*. Nevertheless, HIV remains an important problem in London, and the city's next goal is the ambitious target of getting to zero: zero new HIV infections, zero preventable deaths and zero HIV-related stigma and discrimination by 2030.

Intensifying the city's response

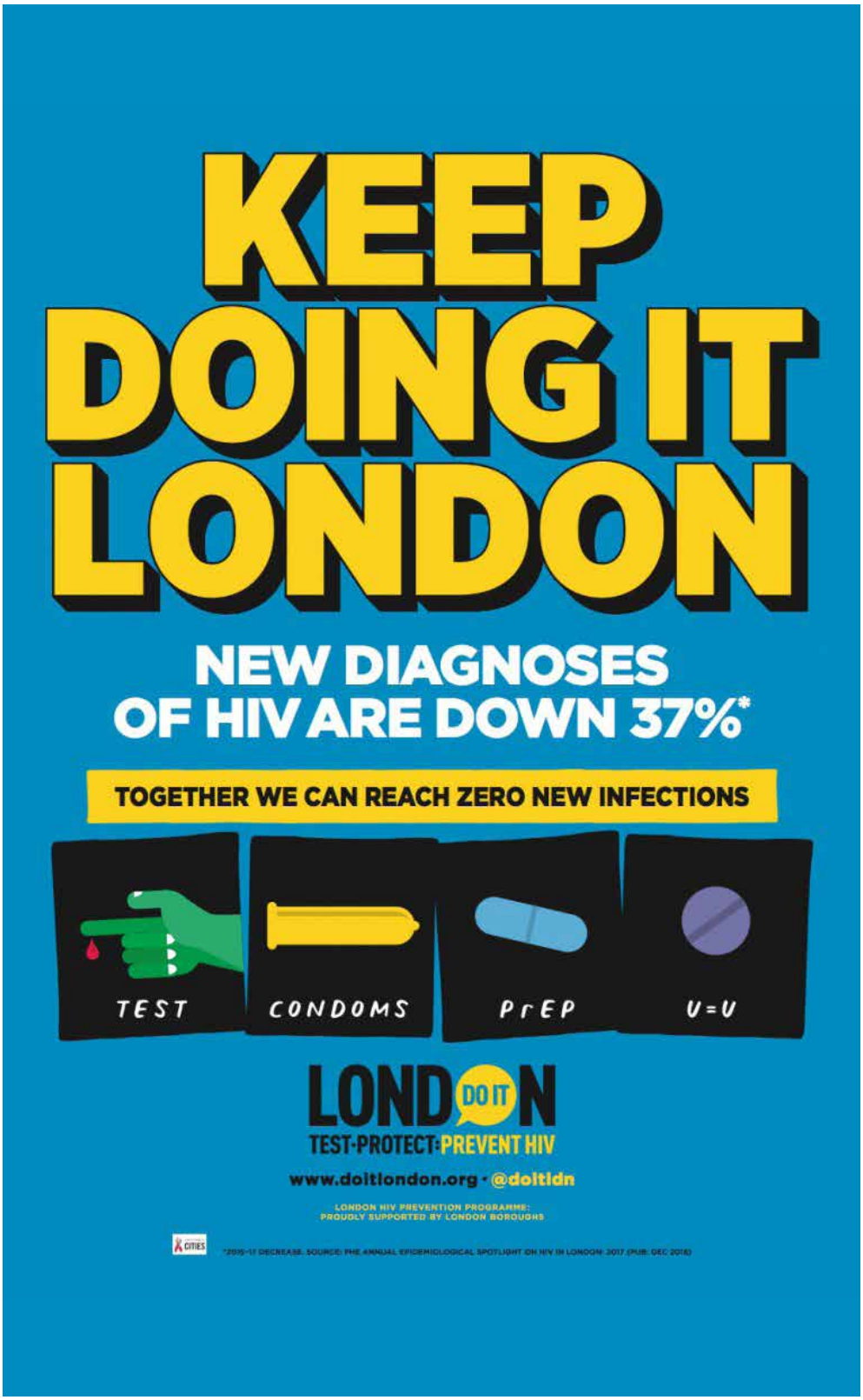
London's experience illustrates the value of combination HIV prevention, bringing together biomedical, behavioural and structural interventions to focus on the communities that are most in need in order to have maximum impact.

A supportive national and local policy context—exemplified by a national sexual health framework, local work through the London HIV Prevention Programme, high-profile campaigns, high-quality epidemiological data, the exceptional expertise of London's clinical and voluntary sector services, and community activism—have all been key drivers of change and crucial to the success of the response.

HIV prevention was made the statutory responsibility of local government in 2013, and the London HIV Prevention Programme and local government decisions on HIV testing have been critically important in turning around the epidemic (which rose exponentially between 2005 and 2013). In 2013, the London HIV Prevention Programme represented a new strategic approach, with new investment and new prevention methods for London, including Do It London, which was the first large, London-wide HIV campaign since the 1980s.

The Do It London campaign continues to make a significant contribution to raising awareness, tackling stigma, promoting combination prevention and contributing to London's recent steep decline in new HIV infections. The campaign was launched in 2015 and is jointly funded and delivered through a unique partnership of all of London's boroughs. The programme is based on delivering sexual health promotion outreach to gay men and other men who have sex with men and other communities that are at increased risk of HIV exposure; it also features a free condom distribution scheme across more than 60 gay venues in the capital.[23] Do It London was the first official campaign to promote PrEP and U = U alongside more conventional HIV prevention methods (such as condom use and regular testing). After the campaign began, there was a citywide reduction of 37% in new HIV diagnoses (40% among gay men and other men who have sex with men) between 2015 and 2017 *(111)*.

[23] For more on the Do It London campaign, please see: www.doitlondon.org



Do it London campaign
Credit: London City.

Increased HIV testing has been pivotal to reducing HIV transmission because it reduces the number of people who are unaware that they are living with HIV and opens the door to prevention initiatives for people who test negative. In 2017, a total of 365 770 HIV tests were conducted in specialist sexual health services in London, an increase of 5% over 2013. This was supported by a significant increase in HIV testing in complementary sites, including community outreach, primary care facilities, emergency departments and online self-sampling.

Rapid initiation of treatment for people who test HIV-positive is another key element of London's success, enabling people with HIV to become virally suppressed, thus reducing the time the person is infectious and maximizing their health. In 2017, 73% of Londoners newly diagnosed with HIV started treatment within 91 days, and a significant number started earlier, particularly at the steep-fall clinics—sometimes within 48 hours of diagnosis.[24]

The fact that HIV testing and antiretroviral therapy are universally available without charge in the NHS is an important component in London's success. However, even with the universal availability of first-class treatment by the NHS, it took time to scale up each component of the cascade: investing in HIV testing, prevention and treatment campaigns; scaling up HIV testing; disseminating and embedding evidence-informed treatment protocols; and working with patients on adherence and engagement with antiretroviral drugs. These steps have all been necessary to maximize the uptake of universal services.

The latest tool in the HIV prevention toolkit, PrEP, is currently only available without charge via clinical trials in England, although a substantial number of people, predominantly gay men and other men who have sex with men, have been able to access PrEP via online pharmacies. The increase in PrEP use in 2016 and 2017 is likely to have contributed to the observed reduction in HIV incidence among gay men and other men who have sex with men *(113).*

London's vibrant, diverse and engaged voluntary and community sector has been another key element of the fight against HIV since the beginning of the epidemic. The sector has been partners in prevention, patient care, and social and peer support, and in wider reproductive and sexual health programmes. Local community-based organizations have been important partners in expanding HIV awareness, tackling HIV stigma and scaling up prevention initiatives, including HIV testing and linkage to care. With support from regional and national funding, they have been drivers of innovation, despite facing considerable pressure as funding support has been reduced, commissioning arrangements have been transformed, and the needs of people living with and at risk of HIV have evolved. Nevertheless, their knowledge of (and acceptance by) communities, relative cost-effectiveness and proactive engagement continue to position the voluntary and community

[24] Steep-fall clinics are sexual health clinics—especially those for gay men and other men who have sex with men—where HIV has fallen significantly. See: 'Do it your way' and help prevent HIV. In: Evening Standard [Internet]. 6 July 2018 (https://www.standard co.uk/lifestyle/health/do-it-your-way-and-help-prevent-hiv-a3874651.html).

sector as owners and advocates for community activism, engagement and programme delivery. Today, HIV care and prevention in the community is evolving from programming that is specific to particular diseases and groups towards a more integrated approach that includes primary care, multicondition approaches and collaborative partnerships that are focused on HIV and its wider determinants.

In January 2018, the Mayor of London, Sadiq Kahn—together with London Councils, Public Health England and the NHS England—joined the Fast-Track cities initiative. To date, the success seen in London has been the result of the collective efforts of local government, the NHS, clinicians, the HIV voluntary and community sector, and people living with HIV.

As London approaches HIV elimination, however, there will be many more challenges. For this next phase, the value of the Fast-Track cities initiative will be in bringing all key stakeholders involved in London's HIV response together, creating a shared forum for the exchange of ideas and articulating a common purpose that will enable collaboration and partnership that accelerates London towards Getting to Zero.

Challenges ahead

Despite remarkable progress, HIV remains a significant clinical and public health problem in London. The 5% of people living with HIV who remain unaware of their HIV status include many different groups that may be disproportionately hard to engage. As the prevalence of undiagnosed HIV infection falls, late diagnosis will become more challenging, and new approaches and tools will be required. In London, late diagnosis has a disproportionately high impact on older people, heterosexuals and people from diverse ethnic backgrounds, which will require tailored approaches to community engagement, testing and care.

Persistently high levels of HIV-related stigma and discrimination remain a major obstacle to overcoming HIV in London. A 2017 survey of Londoners living with HIV showed that 14% had not told anyone about their HIV status other than health-care professionals. A further 8% reported avoiding seeking health care when they needed it in the past year due to perceived stigma and discrimination, and 4% said they had been refused health care or experienced a delayed treatment or medical procedure in the past year due to their HIV status.

A recent YouGov survey, commissioned by the Terence Higgins Trust, highlighted the very low levels of awareness of U = U, even among LGBTI respondents, who said they would avoid sexual contact with someone living with HIV who was virally suppressed *(114)*. Concerns about HIV stigma within the NHS have also been identified as a continuing challenge by those living with HIV; more work will need to be done in primary, secondary and specialist services to tackle this problem.

Getting to zero

Since signing the Paris Declaration, London has convened a Fast-Track Cities London Leadership Group with senior representatives from the city's four accountable health and care bodies, and from people living with HIV, clinicians and community-based organizations. London is fortunate to have a citywide transformation and delivery unit called the Healthy London Partnership, which convenes partners from across the health and care system to propose strategies with the ultimate goal of making London the world's healthiest city. Healthy London Partnership is the delivery partner for Fast-Track Cities London, and it is providing expertise and programme management of the initiative on behalf of the Fast-Track Cities London Leadership Group.

Based on key stakeholder engagement and an asset and gap analysis, the Leadership Group has identified key priority areas for action. These priority areas are captured in the London Fast-Track cities strategic road map, which aims to focus coordinated activities in four areas: systems leadership, advocacy, collaborative delivery, and communications and engagement. This strategic plan will ensure the London Fast-Track cities initiative is aligned with wider strategic plans, such as the Mayor's Health Inequalities Strategy and the long-term plans of local government and the NHS.[25]

To support the delivery of the Fast-Track cities London strategic plan, NHS England has made a financial investment totalling £6 million over a three-year period, enabling the development of a major work programme. Industry partners have also pledged their financial support for London's work.

In summary, there is much to learn and celebrate from London's HIV journey, yet there is much more to do together.

[25] For more on these wider strategic plans, please see: The London health inequalities strategy, September 2018. London: Greater London Authority; 2018 (https://www.londongov.uk/sites/default/files/health_strategy_2018_low_res_fa1.pdf).

BEYOND 90–90–90

In the five years since the launch of the Paris Declaration, the Fast-Track cities initiative has made considerable progress in strengthening the urban AIDS response. Results are already apparent, with many cities making progress in reaching the 90–90–90 and other targets, and observing declines in new HIV infections.

While this report illustrates success stories in a number of cities, however, much more must be done. For several cities, achieving the Fast-Track Targets in specific populations has been a challenge. The groups most likely to be left behind include key populations, young people, migrants and people living in informal settlements. Strategies to reach these populations still need to be fully articulated and implemented in many Fast-Track cities.

The 2018 revision of the Paris Declaration spells out areas where greater efforts need to be made. These include the following:

- Addressing the human rights of key populations, including laws that discriminate against them or criminalize them. People affected by HIV should enjoy equal participation in civil, political, social, economic and cultural life, free from prejudice, stigma and discrimination, violence or persecution.
- Including people living with HIV in a meaningful way in decision-making around policies and programmes that affect their lives.
- Fostering social equality and ensuring equal access to health, education and learning.

The revised Paris Declaration also commits signatories to a more comprehensive approach that includes:

- New prevention tools, such as PrEP, and an understanding of the prevention dividend of treatment (U = U).
- Ending the epidemics of TB and viral hepatitis, and integrating HIV with these and other services.
- Addressing related issues of mental health, substance use disorders and comorbidities associated with aging with HIV.

Many of the case studies in this report illustrate the rewards of greater efforts to address the needs of key populations and to include people living with HIV in policy and programming. Several cities are also benefiting from new prevention tools and the use of evidence, such as U = U, to tackle stigma and discrimination. The following examples provide brief insight into the work of other leading cities that have embarked on the more comprehensive approach of the revised Paris Declaration.

Integrating HIV with other services

Kingston has committed to removing vertical programmes, and it is bringing two different agencies together in an innovative programme for key and vulnerable populations. Skilled outreach staff work from mobile buses in high-prevalence

locations. The intervention package comprises screening for HIV and STIs, family planning counselling, provision of condoms and linkage to care.

A mobile bus in Kingston, Jamaica, providing HIV and other services.
Credit: Kingston.

Mexico City is integrating HIV and hepatitis C services through a process where HIV and hepatitis clinical teams work closely together. Hepatitis C tests are offered to all HIV-positive patients, and HIV clinical teams evaluate cases and propose treatment, accompanying patients to hepatitis clinics when needed. During hepatitis C treatment, HIV clinical teams maintain close contact with patients, providing education, behavioural interventions and periodic medical evaluation. Mexico City aims to treat all HIV–hepatitis C coinfected patients, increase testing rates in populations at higher risk of HIV exposure, continue behavioural interventions to avoid ongoing transmission of hepatitis C and monitor hepatitis C transmission clusters.

Mexico City is among the cities that have committed to integrated services for TB and HIV. In Mexico City, HIV care sites are responsible for TB diagnosis and prevention, and they also conduct referrals to TB programme sites where cases are confirmed and treatment is administered.

At the global level, work is underway to integrate HIV with other health initiatives such as the **Zero TB in Cities Initiative**.[26] The purpose of the Zero TB in Cities Initiative is to create "islands of elimination" with local partners in high-burden areas that will contribute to lowering rates of TB. The founding partners of the Zero TB in Cities Initiative are committed to providing support to cities and districts through advocacy, resource mobilization, technical support, and monitoring and evaluation.[27]

Structural interventions

Montréal, Canada has resolved to improve living conditions for vulnerable people of all ages living with HIV.[28] This includes: advocating for free public transport to

[26] For more on the Zero TB in Cities Initiative, please see: https://www.zerotbinitiative.org

[27] The founding partners are Stop TB Partnership, Harvard Medical School Center for Global Health Delivery and Partners in Health.

[28] Please see: Montreal (QC): City of Montreal (http://www.montrealsanssida.ca/wp-content/uploads/2018/11/Resume-Plan_d-Action-Commun_MSS_ANG.pdf).

ensure people can access prevention and care services; improving food security, including funding for infant formula for HIV-positive mothers; advocating for access to affordable, secure and appropriate housing; and improving access to quality child care services.

Montréal is also committed to stigma elimination in the city through multiple strategies, including educating the broader population about HIV, particularly the U = U message. They also are training health and social service professionals to develop inclusive and culturally safe practices. Municipal action plans continue to fight discrimination against communities affected by HIV, focusing on homophobia, transphobia and racism.

The End Stigma Alliance in **San Antonio, in the United States,** has initiated a collaborative effort to support people living with HIV in Bexar County Jail, linking them to support services after they are released. The multisectoral County Jail Linkage Work Group has developed a referral system and created a so-called warm handoff process between county jail nursing staff and local AIDS service organizations. This was first implemented in late February 2019, and it has since successfully linked four people to care in the first three months.

2020 and beyond

As the 90–90–90 by 2020 deadline approaches, there is extensive discussion about the way forward. Under the leadership of UNAIDS, discussions are taking place at the global level to develop new targets for 2025. These new targets are anticipated to be agreed in early 2020, and they will also guide target-setting for Fast-Track cities.

Some advocates are calling for a "fourth 90" target to monitor the quality of life for people living with HIV (115). This concerns health-related well-being—including mental wellness and stigma reduction—and/or social and economic support for people living with HIV *(116, 117)*.[29]

Stigma and quality of life for people living with HIV are likely to feature in the post-2020 version of the Paris Declaration. IAPAC has implemented a quality of care survey across 24 Fast-Track cities with the primary objective of quantifying aspects of the quality of care experienced by people living with HIV, including topics such as stigma and discrimination, mental health and access to quality care. Table 2 describes selected data from five of the cities highlighted in this report.

The challenge for the post-2020 vision is to catalyse further achievements across all Fast-Track cities by using implementation science to study, document, and facilitate the adoption of good practices that have achieved measurable results in curbing municipal HIV epidemics. As important, we must consider the commitment and address the struggles of cities that have not yet reached critical Fast-Track Targets.

[29] For more information, see the HIV Outcomes Initiative: http://hivoutcomes.eu

Table 2
Data on quality of care from five cities in a global survey

	Madrid	Athens	Nairobi	Salvador	Bangkok
Proportion of people living with HIV reporting having almost always or often experienced feelings of anxiety and/or depression in the past 30 days	22%	36%	18%	18%	8%
Proportion of people living with HIV reporting antiretroviral therapy and/or side effects as very limiting or somewhat limiting of their ability to perform life activities in the past 12 months	18%	29%	34%	20%	33%
Proportion of people living with HIV reporting a very positive or positive outlook on life in the past 12 months	53%	58%	83%	65%	67%
Proportion of people living with HIV reporting being very satisfied or satisfied with their overall quality of life over the past 12 months	68%	52%	76%	78%	71%
Proportion of people living with HIV reporting feelings of stigma and/or discrimination by their community in the past 12 months	38%	27%	45%	17%	14%
Proportion of people living with HIV reporting feelings of stigma and/or discrimination by a health-care facility or health-care worker in the past 12 months	18%	19%	35%	8%	15%
Proportion of people living with HIV that have seldom or never disclosed their status to friends or family in the past 12 months	35%	34%	32%	45%	36%
Proportion of people living with HIV reporting very satisfied or satisfied with the quality of primary health care in the past 12 months	77%	48%	57%	69%	69%
Proportion of people living with HIV reporting feeling extremely or very controlled over their lives in the past 12 months	35%	63%	52%	68%	58%
Proportion of respondents reporting being satisfied or very satisfied with their quality of life, while also reported being on antiretroviral therapy consistently	-	48%	-	77%	59%

Source: IAPAC data, 2019.

Conclusion

This report describes the efforts of the many partners in the Fast-Track cities initiative to accelerate the AIDS response and deliver on the goals of the Paris Declaration. Urban leaders have shown commitment and political will, and cities across the globe have developed strategic action plans with ambitious targets and bold implementation strategies. New partnerships have been forged between local authorities, civil society organizations, implementers and researchers, and these have contributed to expanded access to quality HIV services.

Innovative and evidence-driven strategies and campaigns have succeeded in strengthening the three 90s, reaching key populations and tackling HIV-related stigma and discrimination. Achievements of the Fast-Track cities include reducing new HIV infections, strengthening adherence and linkage to care, and creating supportive environments for people living with HIV and key populations.

As December 2020 marks the deadline for achieving the 90–90–90 treatment targets, it is clear that despite much progress there are many challenges still ahead. But the case studies in this report, drawn from cities from different continents and representing vastly different epidemiological profiles and sociocultural and economic realities, offer a glimpse at evidence, ideas and replicable good practices to inspire and encourage other cities to achieve similar results. They hold the promise that ending the AIDS epidemic as a public health threat by 2030 is within our grasp.

Abbreviations

BMA	Bangkok Metropolitan Administration
FQHC	federally qualified health centre
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
H-TEAM	HIV Transmission Elimination Amsterdam
HCDCP	Hellenic Centre for Diseases Control and Prevention
IAPAC	International Association of Providers of AIDS Care
JAC	Johannesburg AIDS Council
LGBTI	lesbian, gay, bisexual, transgender and intersex
MDACS	Mumbai District AIDS Control Society
MMCs	members of the mayoral committee (Johannesburg)
PEP	post-exposure prophylaxis
PEPFAR	United States President's Emergency Plan for AIDS Relief
PrEP	pre-exposure prophylaxis
STIs	sexually transmitted infections
TB	tuberculosis
U=U	undetectable equals untransmittable
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VAC	Victorian AIDS Council
WHO	World Health Organization

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