Recommended HIV/AIDS Strategies for Hong Kong (2022-2027)

Consultation Document
(Draft of Strategies)

Acknowledgements -

Pending

Terms of Reference of the Hong Kong Advisory Council on AIDS

To keep under review local and international trends and developments relating to HIV infection and AIDS;

To advise the Government on policy relating to the prevention, care and control of HIV infection and AIDS in Hong Kong; and

To advise on the co-ordination and monitoring of programmes on the prevention of HIV infection and the provision of services to people with HIV/AIDS in Hong Kong.

Acronyms

ACA	Hong Kong Advisory Council on AIDS
AEM	AIDS Epidemic Model
AIDS	Acquired Immunodeficiency Syndrome
HAART	Highly Active Anti-retroviral therapy
ATF	AIDS Trust Fund
CDC	Centre for Disease Control and Prevention
CFA	Community Forum on AIDS
DH	Department of Health
EM	Ethnic minorities
FSW	Female sex workers
HARiS	HIV/AIDS Response Indicator Survey
HIV	Human Immunodeficiency Virus
HKCASO	Hong Kong Coalition of AIDS Service
MSM	Men who have sex with men
NGO(s)	Non-Governmental Organisation(s)
PLHIV	People living with HIV
PrEP	Pre-exposure prophylaxis
PRiSM	HIV Prevalence and Risk behavioural Survey for Men who have sex with men
PWID	People who inject drugs
STI	Sexually Transmitted Infections
TG	Transgender people
UATP	Universal Antenatal HIV Antibody Testing Programme
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organization

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Basis of Current Strategies

Since 1994, the Hong Kong Advisory Council on AIDS (ACA) has produced six sets of *"Recommended HIV/AIDS Strategies for Hong Kong"* (the Strategies). The Strategies serve as blueprint for coordinated and consolidated response to the HIV/AIDS epidemic in the next few years. Though the number of recorded HIV new infections has declined for consecutive six years, there is no room for complacency. This new Strategies articulates visions, objectives, and strategic actions to prevent new HIV infections, treat people with HIV to improve health outcomes and realise prevention, and better integrate and coordinate the efforts of all stakeholders to achieve the targets with the goal of ending AIDS as a public health threat in Hong Kong by 2030.* The Strategies also establishes indicators to measure progress and designates priority populations and key strategic areas of focus.

2. Formulation of the Strategies adopts objective, integrative and consultative processes with a public health oriented approach. Therefore, six inter-related factors have been considered during the formulation process, including:

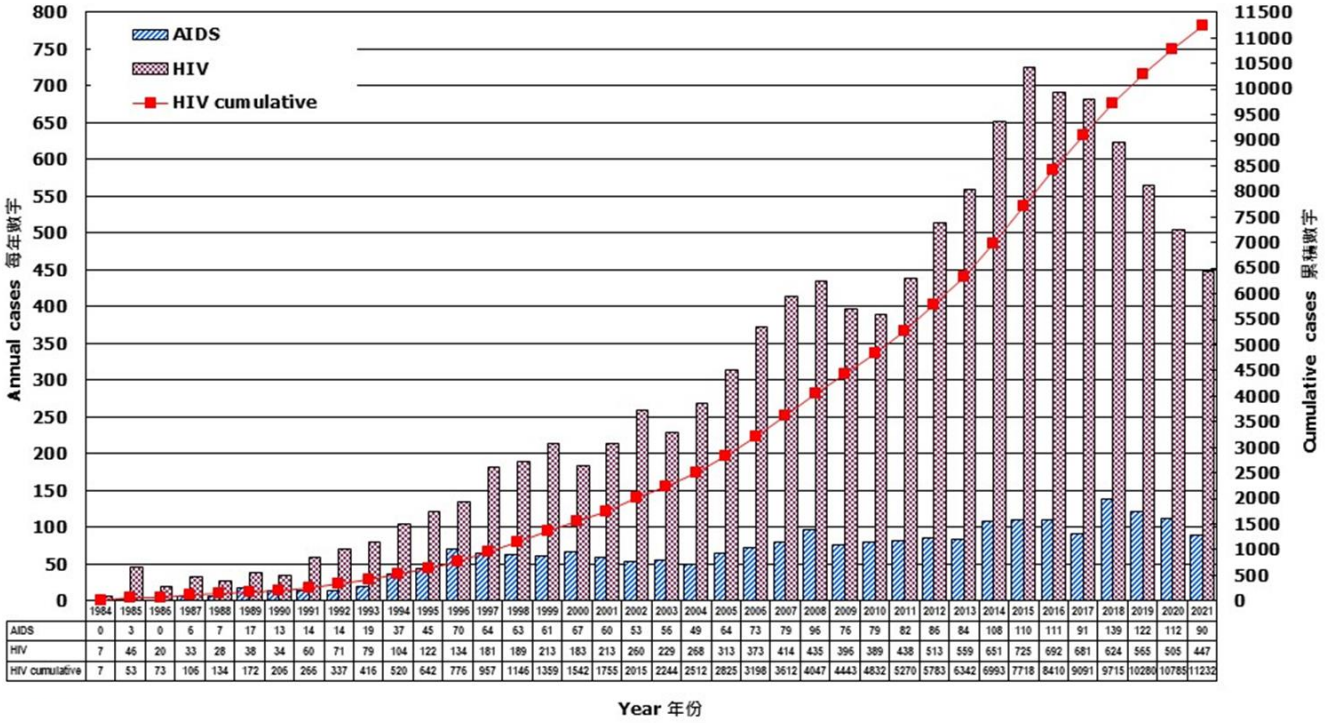
(i). Global and local HIV situation and future projection;
(ii). Current HIV responses in Hong Kong;
(iii). Evidence of scientific developments;
(iv). Recommendations of the World Health Organization (WHO), Joint United Nations Programme on HIV/AIDS (UNAIDS) and other international health agencies;
(v). Opinions of community stakeholders; and
(vi). Opinions from the public consultation.

** "Ending AIDS as a public health threat by 2030" was advocated by UNAIDS in its latest Strategy (2021-2026), refers to a reduction of 90% in new infections and AIDS-related deaths by 2030, compared to a 2010 baseline.*

Global and local HIV situation and future projection

3. In Hong Kong, the number of newly reported HIV infection recorded by the Centre of Health Protection (CHP) of the Department of Health (DH) has decreased in recent years when compared to the peak in 2015 (**Figure 1**), however a concentrated epidemic among vulnerable groups, such as young men who have sex with men (MSM), warrants our sustained attention. MSM accounted for 65.7% of reported cases with determined route of transmission in 2021, followed by heterosexual (33.5%) and injecting drug use (0.8%)[1]. (**Figure 2**) Community-based surveys conducted by DH showed that the estimated HIV prevalence was 6.54% in MSM (2017); 5.11% in male-to-female transgender (2017); 0% in female sex workers (FSW) (2019); 1.24% in methadone clinic attendees (2021) and 0.1% in the general population.

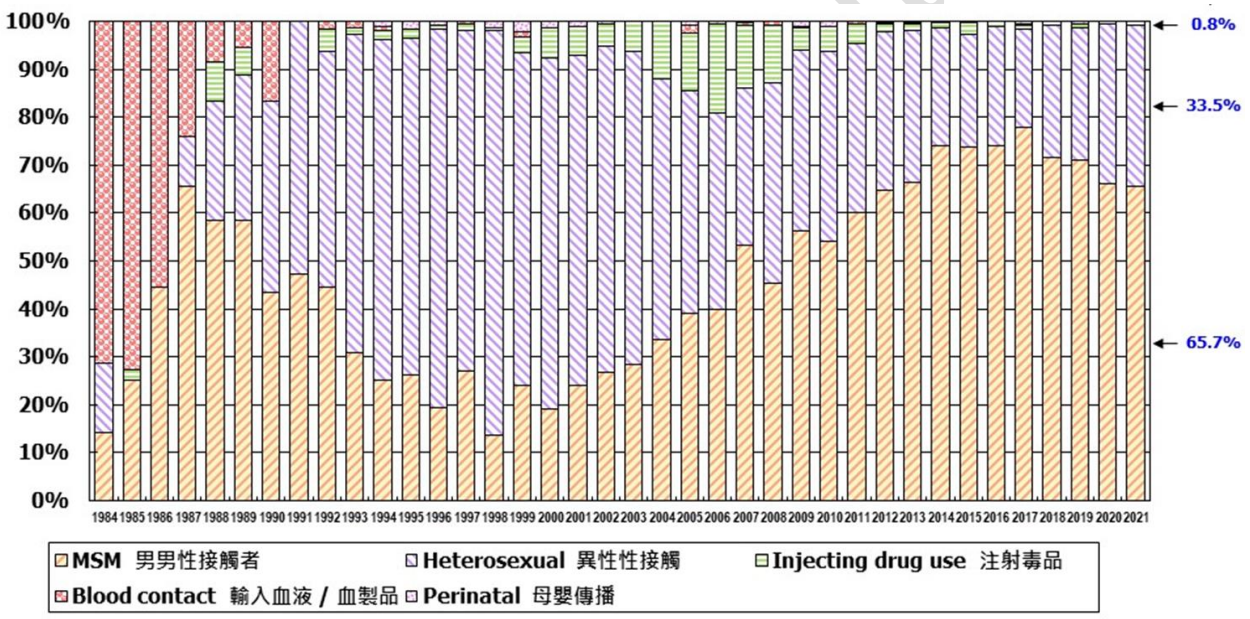
Figure 1: Annual HIV/AIDS statistics (1984-2021)



	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
AIDS	0	3	0	6	7	17	13	14	14	19	37	45	70	64	63	61	67	60	53	56	49	64	73	79	96	76	79	82	86	84	108	110	111	91	139	122	112	90
HIV	7	46	20	33	28	38	34	60	71	79	104	122	134	181	189	213	183	213	260	229	268	313	373	414	435	396	389	438	513	559	651	725	692	681	624	565	505	447
HIV cumulative	7	53	73	106	134	172	206	266	337	416	520	642	776	957	1146	1359	1542	1755	2015	2244	2512	2825	3198	3612	4047	4443	4832	5270	5783	6342	6993	7718	8410	9091	9715	10280	10785	11232

4. In developing this Strategies, ACA hired expertise service in HIV epidemiology from the Stanley Ho Centre for Emerging Infectious Diseases, the Chinese University of Hong Kong (CUHK) for updating the epidemic model. Estimation by its consultancy team using the Spectrum software showed that a total of 7,913 people are living with HIV (PLHIV) in 2020, in which 7,402 (94%) were aware of HIV status and 6,237 (84%) of them were under HIV care. Albeit at slower pace, the number of PLHIV will reach 8,492 in 2025 and 9,086 in 2030 respectively, with around 60% of new cases being MSM.

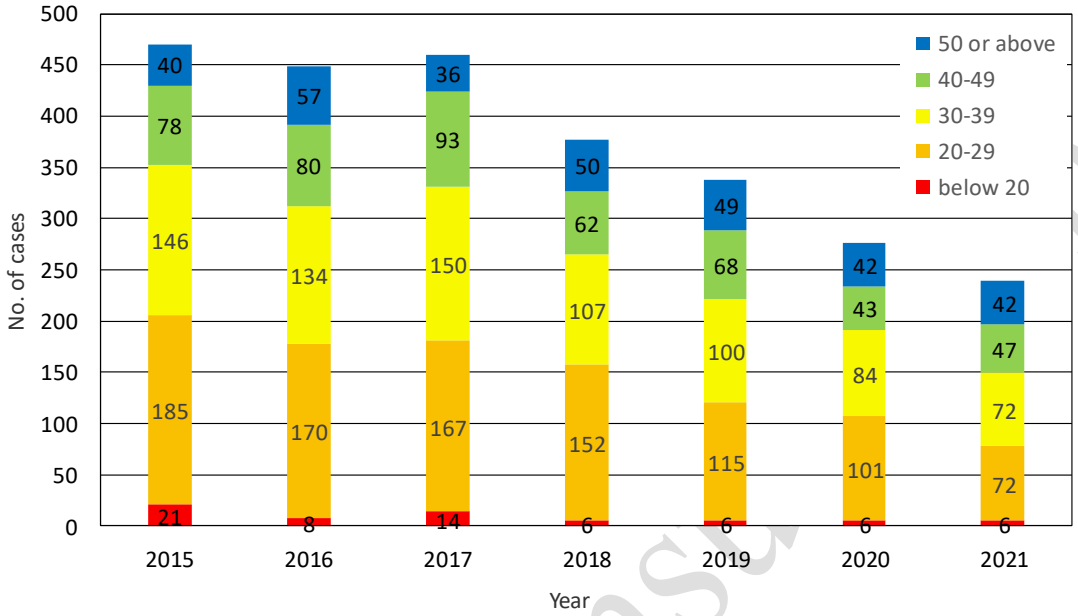
Figure 2. Route of transmission of HIV infection (1984 to 2021)



5. The local epidemiology of HIV infections in recent years is remarkable for a high proportion of MSM, affecting particularly younger (20-39 years old) age group, a phenomenon also observed in many other regions, including United States[2], United Kingdom[3], Australia[4] and Canada[5] and big cities of Mainland China[6]. Nevertheless, the number of local MSM new infections began to decline after reaching the peak in 2015. (**Figure 3**) The total number of HIV reports in 2021 was 239, which had decreased by 49% as compared to the 470 cases in 2015. The median age of MSM cases was 34 and majority (78%) acquired the

infection locally.

Figure 3. New MSM infections breakdown by age (2015 to 2021)



6. Heterosexual transmission continues to account for a significant number of new reports. In 2021, there was a total of 122 heterosexual cases reported, which accounted for more than one-fourth of all reported HIV cases. The proportion of heterosexual cases among all reported HIV cases dropped from its peak of 71.4% in 1998 to the lowest of 17.8% in 2017 then increased to 27.3% in 2021. In recent years, the female heterosexual cases rose slightly faster than the male cases, resulting in a gradual increase of female to male ratio for heterosexual cases from 0.53:1 in 2004 to 0.97:1 in 2021. The median age of heterosexual cases in 2021 was 45 for female and 47.5 for male. In 2021, heterosexual male cases were mainly Chinese (77%) whereas Asian non-Chinese accounted for 42% for female heterosexual cases.

7. The number of cases acquiring HIV via injecting drug use has remained stable of below 10 cases in recent 5 years. Despite that, the proportion of injection and risky needle-sharing behaviour among drug users as gauged from several local surveys remained at a high level, which continued to pose a potential risk of cluster outbreak and rapid upsurge of infection in the population.

Review of current responses to HIV/AIDS

Current HIV responses in Hong Kong

8. In order to give directions on HIV response for the whole society, the *Recommended HIV/AIDS Strategies (2017-2021)* has set out priority areas for action for two primary target populations, namely MSM and PLHIV; and four other key populations: people who inject drugs (PWID), male-to-female transgender, ethnic minorities (EM) and FSW and their male clients (MCFSW). Nine specific and time-bound targets were laid down and to be attained by 2020.

9. During the past five years, the Government, community members, AIDS non-governmental organisations (NGOs) and other related stakeholders have participated in the work of HIV. The results of first year, mid-term and end-year review conducted by ACA Secretariat were laid out in **Annex**. It should be noted that the venue-based survey by DH (HIV and AIDS Response Indicator Survey - "HARiS") was not annually performed for all key populations while a large-scale community-based survey (HIV Prevalence and Risk behavioural Survey for Men who have sex with men – "PRiSM") was conducted in 2017. Another PRiSM of MSM will be rolled out later in 2022 at the time of preparing this new Strategies. As the sampling frame and methodology of the two types of survey is different, the findings should not be directly compared. As the COVID-19 pandemic had severely interrupted NGOs' services, HARiS for FSW and MCFSW was suspended in 2020. Below summarises the findings in the key areas as compared with the targets set in the Strategies (2017-2021).

I. Prevention coverage

10. Targets set for receiving free condoms (in the past 1 year) could not be reached for all key populations, particularly MSM. There was no significant improvement when compared with the level achieved in 2017.

On the other hand, coverage of combination prevention services could almost reach the set targets for MSM, TG and FSW and well above target for PWID. The HIV testing rates of all key populations remained similar with no obvious increase in the past few years. The COVID-19 pandemic has led to temporary interruption of HIV testing and prevention services hence hampered the effort to achieve the targets.

II. Protective or behavioural risk factors

11. Condom use rate among key populations was monitored. Condom use for sex with regular sex partners among MSM was lower. Consistent condom use among MSM was low and far from reaching the target. It revealed that MSM might selectively used condom depends on type of sex partner/activity. The lower rate of condom use may be partly attributed to the increasing use of pre-exposure prophylaxis (PrEP) in recent years. The target set for sharing needles with other people for PWID could almost be achieved in 2019 but worsened in 2020 when a rebound was observed. The frontline NGO staff reported that COVID-19 pandemic had driven most PWID idling at home and pharmacies closed at the worst time when they could not buy new needles.

III. Diagnosis and treatment service

12. HIV treatment and care cascade, or HIV care continuum, is a monitoring tool employed to estimate the number of HIV infected people engaged in each level of the cascade (linkage) and lost in each level (leakage), identify gaps in the care continuum and to guide the planning of future interventions for improvement in the delivery of services to HIV patients. The main steps in the cascade involve diagnosing HIV infection, linking people infected with HIV to treatment and prevention services, enrolling and retaining people in pre-ART (antiretroviral treatment) care, initiating ART, ensuring long-term adherence and ultimately achieving and maintaining viral load suppression.[7]

13. The external consultancy from CUHK adopted the Spectrum, which was developed by Avenir Health and approved by UNAIDS[8] to construct the HIV treatment cascade. Base on the latest cohort surveillance database, consultancy analysis revealed that the 3 "90s" were almost achieved. As at end of 2020, an estimated 94% of PLHIV was diagnosed, 84% of them were receiving treatment, of which 97% could achieve suppressed viral load to an undetectable level. The anonymity of HIV reporting system made it more difficult to keep track of the updated status of all the reported cases, while cohort database revealed that those "lost to follow up" were more (or mostly) likely to be non-local cases without Hong Kong identity card upon notification, who might have left Hong Kong after diagnosis. On the other hand, an improvement was noted in the diagnosis rate since last Strategies despite no improvement in community testing rates from various surveys.

Emerging service needs and challenges faced

14. ACA conducted periodic reviews on implementation of last Recommended HIV/AIDS Strategies. Among the many initiatives launched by different stakeholders, AIDS NGOs have taken a major role on HIV prevention while the 3 public HIV clinics have been providing treatment services for a majority of PLHIV. The emerging COVID-19 pandemic has created new challenges to all parties. Nevertheless, with a robust healthcare infrastructure and HIV treatment and care system, disruptions to in- and out-patient services for PLHIV have been minimal. Below are some of emerging service needs identified by various stakeholders:

I. Increasing use of new digital channels and format for networking

15. Mobile phone apps and social media platforms have been popular among key populations for finding sexual partners. Owing to the social distancing measures implemented during the COVID-19 pandemic, sexual activities in gay venues were replaced by private parties of smaller scale at homes and hotels. These had made the at-risk populations harder-to-reach than before and most HIV prevention works have been shifted to online. In recent years, NGOs has launched innovative projects using social media platforms and enhanced online outreach which could reach some community members who had not received their services before.

II. Increasing use of PrEP

16. In HARiS 2020, 6.3% of MSM used PrEP in the past 1 year, compared to 1.1% in the similar survey conducted 2018. Only 9.3% respondents had never heard of PrEP, compared with 26.3% in 2018. Frontline AIDS NGOs staff also reported an increasing use of PrEP among MSM but the overall coverage of PrEP among the community was not well understood. The community also reflected that cost burden of accessing the drug locally was their major concern[9]. About half (49.2%) of the ever PrEP users among the respondents in HARiS 2020 reported having received PrEP from overseas clinics/organisations.

17. From 2017-18 to 2019-20, the Council for the AIDS Trust Fund approved a sum of $7.3 million to support 6 research studies related to PrEP. Results of the PrEP-related studies brought local information on acceptability and feasibility of PrEP programmes in Hong Kong, and the appropriate model of delivery.

III. Increasing recreational drug use among MSM

18. In recent years, “chemsex” (or “chemfun”) has become a colloquial term used by gay men or other MSM to mean sex with psychotropic substances, commonly methamphetamine and γ-hydroxybutyric acid (GHB), to enhance the sexual experiences. In HARiS 2020, 8.6% of MSM respondents reported to have chemsex in the past 6 months, which was slightly higher than the 7.3% in HARiS 2018. Surveys revealed the commonest substances used were poppers, ice and GHB.[10] Health awareness of chemsex users were often higher than those without chemsex, which may be due to their higher perceived risk of acquiring HIV.[11] For instance, chemsex users reported a higher HIV testing rate and PrEP usage than non-chemsex users.[10]

IV. Some at-risk communities were more difficult to reach to provide services

19. The COVID-19 pandemic has placed many sex workers in a particularly difficult situation. Due to closure of sex venues during COVID-19 pandemic, NGOs found it difficult to reach the at-risk communities while some sexual activities have been shifting to private settings with promotion through social apps. Physical outreach to sex venues became infeasible during the epidemic and provision of HIV/STI testing services was affected. Some NGO programmes targeting MSM had enhanced their HIV self-testing services, which served as an alternative option to conventional testing and could successfully attract those who had never tested.

Situation of other populations of concern

I. Infants infected with HIV

20. The coverage rate of the Universal Antenatal HIV Testing Programme (UATP) had remained at a very high level (> 98%) in the past decade. However, from 2009 to 2021, there were seven infants infected with HIV whose mothers were screened HIV negative by UATP during early antenatal period. The mothers were suspected to get infected at a later stage of pregnancy or during the post-partum period without knowing, and thus transmitting the virus to their children. Three of the mothers were non-Chinese Asians (one Filipino, one Indonesian, one Vietnamese) and the remaining were Chinese. Six out of seven of the spouses/partners had confirmed HIV infection. Unprotected sex during pregnancy with their current partners was identified as common risk factor for these cases.

II. HIV infection among non-Chinese Asians

21. In 2021, the 91 non-Chinese HIV cases were newly reported which constituted 20% of reported HIV cases. Although the proportion of new HIV cases from ethnic minority (EM) has decreased from 31.3% in 2011 to 15.9% in 2017, it increased again to 20% or over in recent 4 years. This ratio was disproportionately higher than the 8.0% of EM among the Hong Kong population.[12] About half of the EM cases were of Asian (non-Chinese) ethnicities.

22. From 2011-2020, there were 1,398 non-Chinese cases while 670 (47.9%) were Asians. Among the Asians, the male to female ratio was about 1:1. Majority of them (74.3%) aged 30-49 years old. Indonesian (23.7%), Filipino (19.9%) and Thai (10.6%) accounted for over 50% of Asian cases, followed by Vietnamese (9.1%) and Nepalese (8.5%). Heterosexual transmission (56.9%) remained as the commonest route for HIV infection in Asians while Hong Kong (44.5%)

was the commonest reported source of infection followed by other places (33.1%) namely Indonesia, Philippines and Thailand. Non-Chinese Asian cases who presented to HIV service in Hong Kong in the same period (2011-2020) often presented late with 46.8% of them with CD4 count less than 200 cell/UL at diagnosis, compared to 34.9% among Chinese cases.

Scientific developments and recommendations from health/HIV authorities of local relevance

Treatment as prevention

23. HIV has become a chronic, manageable condition since the introduction of highly active antiretroviral therapy (HAART) which improved substantially the life expectancy of HIV-infected individuals. As a result, many PLHIV who are infected early in the course of their lives are confronted with the similar effects of ageing as the general population. Non-AIDS diseases now account for the majority of deaths in PLHIV. Universal treatment has now been widely recommended and adopted by various overseas authorities for all adults living with HIV, regardless of the clinical stage and at any CD4 cell count. (US[13], UK[14], WHO[15])

24. In recent years, overwhelming body of clinical evidence has firmly established that a person with HIV who takes HAART as prescribed and gets and stays virally suppressed to an undetectable viral load has effectively no risk of sexually transmitting HIV to HIV-negative partners. The concept was framed as U=U (Undetectable = Untransmittable)[16].

25. The "test and treat" strategy, i.e. initiating treatment as soon as possible after diagnosis, has been widely adopted in Hong Kong since 2015 in line with international development. As of December 2020, over 97% of PLHIV who are under the care of public sector are receiving highly active anti-HIV treatment.

26. Despite the effort to promote early testing for early diagnosis and the advancement of HIV medicine, in 2020, there were 41.9% of newly reported cases who were diagnosed late defined as CD4 count at diagnosis less than 200/μL[#]. Late diagnosis was more common in those who infected through heterosexual route (male: 68.4%; female:

58.9%). Although the percentage of late diagnosis among MSM was lower (around 37.2%), it still contributed half (51.3%) of all the late diagnosed cases in 2021 due to its high number of reported cases as a whole.

 # CD4 cells are white blood cells that play an important role in the immune system and its cell count indicates the integrity of the immune system. PLHIV who have a CD4 cell count below 200/μL are at high risk of developing serious illnesses. An effective antiretroviral therapy can reduce the viral load (the number of virus in human blood) and increase the number of CD4 which helps maintain the immune system, as well as contribute to fewer opportunistic infections and HIV-associated cancers

HIV self-testing

27. In 2016, WHO published the first global guidelines on HIV self-testing, in which HIV self-testing (HIVST) was recommended to be offered as an additional approach to HIV testing services. Lay users can perform HIVST reliably and accurately and achieve performance comparable to that of trained health-care workers.[17] Globally, many countries have developed HIVST policies, and implementation is growing rapidly. WHO published a new guidance in 2019 to optimise HIVST implementation, including effective service delivery models, linkage to care and support tools.[18]

28. In Hong Kong, there is currently no specific legislative regulation of medical device. Nevertheless, an administrative control system, the Medical Device Administrative Control System (MDACS), has been set up by DH for voluntary listing of medium and high risk medical devices (including in-vitro diagnostic medical devices such as HIV test kits) that conform to essential principles of safety, quality and performance. Relevant information of the listed devices for HIV test has been uploaded to the website of the DH Medical Device Division.[19] As of November 2021, there were 15 HIV tests for professional use listed

under MDACS but no listed HIV test kits were specified for self-testing. The suppliers and manufacturers of the HIV self-testing kits are encouraged to apply for listing under MDACS.

29. HIV self-test kits are available in private pharmacies or on the internet. A large-scale self-testing study by DH was conducted from September 2019 till December 2021. Positive feedback was received and the study revealed that HIVST was well accepted by the target participants (MSM in the first phase and included TG in the second phase) and majority of self-testers (98.5% in the first phase) could correctly interpret the test results by themselves without assistance.[20] The option of blood-based self-test kit, in addition to oral fluid as specimen, was added in the second phase with enhanced online promotion using social media. The overall feedback was positive and over 2,500 test kits were ordered in the two phases. As high as 30.8% and 20.8% were "first time testers" when they first joined the two phases of study respectively. The HARiS survey also revealed HIVST had gained its popularity with more MSM are using it as alternative option for testing HIV.

HIV combination prevention

30. No single HIV prevention strategy will be sufficient to control the HIV epidemic and more prevention approaches emerged in recent years, ranging from condom distribution, STI screening, harm reduction services, PrEP to interpersonal communications such as to promote the message of U=U. Provision of HIV combination prevention options should also be tailored according to risk assessment of the priority groups, prioritised to benefit the people who are not being reached and underserved groups. One of the examples is the 56 Dean Street model in UK, in which a strong engagement with the sexual minority community and flexible prevention services adapted to users' changing needs.[21] UNAIDS has recommended combination prevention programmes tailored to people at risk of HIV infection in its new HIV strategy

(2021-2026). It has set an ambitious target of "*95% of people at risk of HIV infection have access to and use appropriate, prioritized, person-centred and effective combination prevention option*"[22].

Ageing with HIV

31. With the availability of effective and durable HAART, PLHIV are having life expectancy approaching that of the general population. With the scale-up of HAART, the average age of PLHIV is increasing in both high and middle/low-income countries. Moreover, there is also a significant number of people acquiring HIV infection at an older age.[23] Non-communicable diseases such as diabetes mellitus, hyperlipidaemia and cardiovascular diseases are associated with HIV as well as HAART, occurring at earlier age than uninfected people.[24] Overseas studies[25,26] revealed that the prevalence of comorbidities, multi-morbidity and frailty was higher in PLHIV than the general population at all ages, and the gap between the two populations widens with age. Screening and management of these conditions also become part of the primary care aspects of HIV management in some regions.[27,28]

32. In Hong Kong, there has been a change in the demographics of the population of PLHIV with HIV clinics now caring for an increasing number of people aged 50 years or older. As of December 2020, there are around 2,362 and 465 active patients following up under the 3 HIV public clinics who are 50 and 65 years of age or over accounting for 38.3% and 7.5% of all the active cases respectively. A review of the PLHIV followed up at the largest HIV clinic in Hong Kong in November 2021 showed that 55.9% of those aged 50 years or above had one or more age-related chronic comorbidities. The most common comorbidities were dyslipidemia (39.5%), hypertension (30.2%) and diabetes (13.3%).

Prevention of mother-to-child transmission (MTCT)

33. Elimination of mother-to-child transmission of HIV is strongly supported by global commitments and the promotion of integration of prevention of MTCT interventions into maternal, newborn child and adolescent health services, as well as strengthened health systems. In developing countries of high endemicity in particular, improved access to sexual and reproductive health services – including preventing unintended pregnancies and enhanced HIV screening for pregnant women has been actively promoted.[29]

34. In Hong Kong, the prevalence of HIV infection in pregnant women had remained stable at a very low level at around 0.01% in 2020 and the previous years. With the launch of UATP in September 2001, the programme was supplemented with rapid HIV testing in labour wards of public hospitals since 2008 to fill the gap for late-presenting pregnant women without documented HIV status in the antenatal period. To further narrow the gap for elimination of MTCT, the Scientific Committee on AIDS and STI (SCAS) has updated and published its *Recommended Clinical Guidelines on the Prevention of Perinatal HIV transmission* in 2018, which states that universal HIV antibody testing, as part of routine antenatal care, should be supplemented by rapid testing when necessary. High risk behaviours should be avoided during pregnancy and breastfeeding; while repeat testing in the third trimester is recommended when risk exists.[30]

Post-exposure prophylaxis (PEP) for HIV prevention

35. Post-exposure prophylaxis is regarded by the WHO as one of the interventions to prevent HIV infection. Anti-retroviral drugs have been prescribed for PEP following occupational exposure as early as in 1990s. In recent decade, many regions of the world extended provision of PEP for non-occupational exposures, most of which are in the context of unprotected sexual exposure and sexual assault, and injecting drug

use. In 2014, WHO updated its guidelines on PEP and provided recommendations across both occupational and non-occupational exposures (nPEP).[31] The UK[32] and US[33] also updated their guidelines on nPEP in 2015 and 2016 respectively.

36. The demand for nPEP in Hong Kong has been steadily rising, especially from those who are sexually exposed. Based on figures from the Integrated Treatment Centre of DH, clients put on nPEP against HIV have outnumbered those on PEP following occupational exposure with nPEP accounted for 87.7% to 93.0% of all cases on HIV PEP annually in the past 5 years. The number of person-times who received nPEP has risen remarkably from 64 in 2011 to 142 in 2020. The SCAS under CHP has also updated its recommendations on the use of nPEP for HIV in 2018, including the treatment eligibility, choice of medications and follow-up arrangement.[34] As opposed to its previous position in 2006, the SCAS now supports the use of nPEP after certain circumstances. Should nPEP be indicated after initial assessment by medical practitioner, it should be started without delay and follow up arranged for reviewing drug adherence, toxicity, counselling and follow-up HIV testing.

Pre-exposure prophylaxis (PrEP)

37. As early as in 2015, a policy brief was released by WHO, recommending PrEP as an additional option for offering to those at substantial risk of HIV acquisition and as part of the HIV prevention strategy planning.[35] From fledgling pilots to implementation studies, various models of PrEP delivery aiming to optimize its benefits have evolved worldwide, ranging from the pharmacy-based model in the US[36], nurse-led model in Canada[37], and community- and facility-based model in Kenya[38]. In Asia-pacific, a literature review[39] identified 11 programmes implemented in seven cities/countries, of which a typology of four PrEP delivery models was delineated: (a) fee-based public service model; (b) fee-based community setting model; (c) free public

service model; and (d) free community setting model. Overall, the free community setting model was most commonly adopted which features utilizing Community Based Organisation(CBO)-operated clinics and community members as key resources, with enhanced approachability and acceptability among target communities.

38. Three local clinical studies were designed with the aim of generating new knowledge to provide evidence in support of the development of an applicable model for PrEP, tailored to the needs of the local community. Funding was granted by Council for the AIDS Trust Fund for the studies:

- "PrEP1" – A preliminary study on the delivery of PrEP for MSM at high risk of HIV transmission through application of a self-financed incentivised approach[40];

- "PrEP2" – A randomized, controlled, open-label, crossover trial to compare the two PrEP regimens (daily versus on-demand) on their coverage of condomless anal intercourse in MSM[41]; and

- "PrEP3" – To develop a local service model for PrEP delivery and test its operability in the real world setting.[42]

While the feasibility of partially self-financed mode of PrEP delivery is feasible with good retention in MSM in Hong Kong was shown in "PrEP1", "PrEP2" further revealed that a high prevention-effective adherence, as reflected from the coverage of condomless anal intercourse, was achievable by either daily or on-demand PrEP among MSM. Both regimens were well accepted, hence suggested a flexible approach adopting either or both regimens with possible switching was warranted in order to suit individual health needs. "PrEP3" is still ongoing and the result is expected to be available later.

Opinions collected from community stakeholders and the public

Opinions from Community Stakeholders' Consultation

39. A Community Stakeholders' Consultation Meeting (CCM) was held from 17 June to 4 August 2021, as one critical element and the first phase of consultation for formulating the ACA Strategies. In collaboration with HKCASO, seven sessions of meetings covering respective key/priority populations were conducted and 3 open submissions were received during the consultation period. Most recommendations raised by the participants were very relevant to improvement of the quality and accessibility of current prevention and treatment services. Details were recorded in its final summary report, which was endorsed by the CCM Working Group in December 2021. The full report was uploaded to the ACA website for public access.

40. The recommendations collected were deliberated at the 116th ACA meeting and the 58th CFA meeting. The eight key strategic areas recommended in this Strategies adopted the categories of recommendations generated from CCM, supplemented with further opinions collected in subsequent phases of consultation.

Opinions from public consultation on the draft Strategies

41. *(Note: This part will be supplemented later after completion of public consultation in mid-2022.)*

Framework for the Strategies

42. The framework of the Strategies took reference from the UNAIDS' *Global AIDS Strategy 2016-2021* and the previous ACA Strategies.

Guiding principles

43. As in the previous Strategies, during the Strategies development, the following set of guiding principles was followed:

(a) **Adopting evidence-based approach** – the response should be evidence-based with significant impact on the local epidemiology;

(b) **Encouraging community participation** – Community and NGOs are key partners in prevention, surveillance and care programmes for hard-to-reach and vulnerable populations. Commitment by the communities and expanded collaboration among organisations and affected communities of people living with, affected or most at risk of HIV will enhance the overall responses;

(c) **Acceptable, accessible and affordable by the affected communities and the whole society** – Interventions should be sensitive to the culture, language and tailored to the needs of the communities, with the cost affordable by the communities in needs and the society as a whole;

(d) **Cultivating a supportive and enabling environment** – a non-discriminatory environment is key to access to HIV-related services. Support from various disciplines including health care (not confined to HIV field), social welfare, education and the whole society is conducive to effective programme

intervention; and

(e) **Prioritising funding and resources** – A sustainable funding with resource allocation should be prioritised to areas where most infections occur, also for hard-to-reach communities for early identification of infected cases. Youth and adolescents, in general should be resourced to set new directions for HIV response.

44. Four specific **objectives** are recommended, covering prevention, diagnosis and treatment. **Key strategies with priority areas of actions** for individual **priority population** are laid out, taking into account latest local situation and service gaps identified in previous sections. To guide the implementation of the recommendations, a series of **ten targets** are set and to be achieved by end of 2026 and are subject to be reviewed regularly during the implementation of the Strategies.

Vision

- Zero new infections, zero discrimination, zero AIDS-related deaths

Objectives

By the end of 2026, to achieve:

- 90% of key populations have access to appropriate, effective and context-specific HIV combination prevention options;
- 95% of people living with HIV know of their HIV status;
- 95% of people diagnosed with HIV receive antiretroviral therapy; and
- 95% of people who are on treatment achieve viral load suppression.

Priority populations to be addressed

Considering the local epidemiology of HIV and associated factors, it is proposed 6 priority populations for focusing the effort and resources to achieve the greatest impact. They include the globally defined key populations who are more likely to be exposed to HIV or to transmit it and whose engagement is critical to a successful HIV response:

- Men who have sex with men;
- People living with HIV;
- Ethnic minorities;
- Transgender people;
- People who inject drugs; and
- Female sex workers and their male clients.

Adolescent and youth is a population of concern, while young MSM as within one of the priority populations warrants our continued attention.

Ten targets to be achieved by 2026

45. To guide the implementation of the Strategies, ten targets are proposed to be achieved by end of 2026:

1.	≧ 95% of MSM and TG who are not taking PrEP use condom at last sex with a non-regular partner whose HIV viral load is not known to be undetectable
2.	≧ 90% of FSW use condoms at last sex with a client or non-regular partner
3.	< 10% of PWID share needles with other people in the past 1 month
4.	≧ 90% of MSM, TG, FSW and PWID have accessed to at least 2 items of HIV combination prevention services provided in the past 1 year, such service include the followings for each key populations:- ▪ MSM: free condoms, STI screening and treatment, mental health support, access to PrEP and PEP ▪ TG: free condoms, STI screening and treatment, mental health support, access to PrEP and PEP ▪ FSW: free condoms, STI screening and treatment, mental health support, access to PEP ▪ PWID: free condoms, viral hepatitis C screening and new syringes
5.	Have accessed to free condoms in the past one year: ▪ At least 70% of MSM ▪ At least 70% of TG ▪ At least 90% of FSW ▪ At least 90% of PWID
6.	80% of MSM, TG, FSW and PWID tested for HIV in the past 1 year and knew the HIV status
7.	95% of PLHIV got diagnosed
8.	95% who know they are HIV positive are receiving treatment
9.	95% who are on HIV treatment has suppressed viral loads
10.	Zero new infection among locally born children

8 key strategic areas and priority actions

46. Eight key strategic areas are framed against the objectives of the Strategies and the current service gaps. They are further elucidated with specific priority actions which include cross-cutting issues applied to multiple priority populations and some recommended actions targeting specific populations.

Key strategic area 1: Intensify accessibility and availability of HIV combination prevention tools

47. Scale-up access to scientifically proven interventions through effective comprehensive programme packages that could address the needs of key populations, while targeted to the right populations is key to preventing new HIV infections in multi-pronged approach.

48. Culture and language sensitive prevention services should be provided in combination as a package, comprising information provision, condom distribution, HIV testing and referral for confirmatory test, etc. A well-designed combination prevention programme should be carefully tailored to community needs; focus resources on the strategic mix of interventions to maximise its effectiveness.

49. Using new media with engagement of influential persons and innovative modalities should be expanded to reach the targeted people for better dissemination of appropriate context-specific HIV prevention messages. The role of communities with peer influence in expanding the reach, scale, quality and innovation of prevention services should be exploited.

Condom and lubricant

- To enhance condom distribution to key populations, market research and feedback collection to understand their condom

preferences for provision is recommended.

- Community condom promotion programme should include knowledge of the health benefits of condoms, where they are available, safer sex and condom negotiation skills.

- For sexually active at-risk groups such as MSM, sex workers and chemsex users, promotion of consistent condom use, irrespective of the type of sexual partners should be strengthened.

- Free condoms should be made readily available at places they frequented.

Pre-exposure prophylaxis (PrEP)

- To develop models that fit the unique social and cultural background of the community, which is dependent on not just the epidemiological context but also the needs of the community.

- Mathematical modelling revealed that the impact of expanding PrEP coverage in averting new infections is correlated with the on PrEP proportion of high-risk susceptible MSM. Hence, MSM identified to have a higher risk of acquiring HIV should have higher priority to access PrEP services, supported by other HIV prevention tools in a package.

- Means to make PrEP accessible in affordable and quality programmes should be explored.

- Public, private sector and NGO all may play its role in concerted efforts to provide care and support to PrEP users, with monitoring of and management of possible side effect and risk compensation[@], and to consider PrEP services integrated to conventional HIV/STI services.

- Capacity building is important, such as building the infrastructure to implement PrEP services and promoting awareness and readiness of both users and potential service providers including the public sector and NGOs.

@ Risk compensation refers to an increase in risk-related behaviours when an intervention reduces perceptions of risk among individuals or a population. While occurrence of gonorrhoea, Chlamydia trachomatis infection and syphilis was found to be substantially increased for those MSM on PrEP [43], data from local studies and experience of implementation should be collected and closely monitored.

Post-exposure prophylaxis (PEP)

- PEP to prevent HIV against non-occupational (sexual) exposure should be meticulous, considering the HIV status of potentially exposed person, HIV status of the source and the acquisition risk from the exposure with individual risk assessment followed by counselling and support by trained healthcare professionals.

- PEP is considered as one of the combination prevention tools for all vulnerable groups, particularly MSM, TG, sex workers.

- Information on its use, place of access and follow-up support should be provided to the vulnerable communities.

- Regular communication between HIV clinics and first line healthcare professionals (such as the Accident and Emergency Department doctors) on updated guidance on its use and referral procedures is desirable.

Harm reduction approach for PWID

- Opioid substitution therapy remains as an integral part of the interventions and has all along played a pivotal role to the control of HIV in Hong Kong. PWID should be educated not to share needles with anyone and dispose the used syringes in a safe manner.

- PWID should have access to new or sterile syringes as far as practicable.

- To avoid needle-stick injury, protective equipment and sharp boxes should be provided to cleaners for safe handling of used needles.

Key strategic area 2: Targeted prevention interventions and education for priority populations

Explore the unexploited potential of social media

50. As young people are adept at connecting across multiple digital platforms through the use of social media, as well as finding sex partners through mobile apps, service providers are encouraged to make use of the potential of digital and social innovations to reach and connect with the priority populations, share HIV knowledge and experiences, deliver online services and support to the communities. Virtual platforms have the merit to reach people in priority populations who have never accessed to HIV prevention services. Nevertheless, conventional face-to-face counselling is still irreplaceable as it could better establish trust with the communities. It is important to establish connection once the at-risk groups are identified, with follow-up and to provide further support when necessary.

51. Online health promotion has become a new norm during the COVID-19 pandemic while engaging key opinion leaders (KOLs) and peers may better appeal to priority populations and raise their awareness. The Government and professional bodies are responsible to dispel misinformation and provide correct and reliable health messages for the communities.

Connecting with the EM community

52. In response to the increasing proportion of new infections from EM community, non-Chinese Asians in particular, targeted prevention programmes tailored to their health needs with consideration of their cultural and linguistic diversity should be developed.

53. Proper use of social media platforms with engagement of consulates, community leaders and agencies may have the potential to reach more community members and disseminate correct HIV-related messages to those who have never accessed the conventional services. They should be informed of the local HIV prevention services available while expertise in providing EM services should be developed.

54. In addition, resources to develop skills and expertise in providing EM services, such as in-depth training for interpreters on HIV-related topics should be available.

Connecting with the transgender people

55. There is scarcity of local resources for HIV prevention specific for transgender people. Given the high vulnerability of HIV infection with the low testing and condom use rate, it is necessary for current HIV service providers to engage transgender people and reveal whether their current approaches are transgender-inclusive and for the transgender groups to engage in HIV-related issues. More researches and surveys need to be conducted to explore the best practices to reach transgender

people for enhancing HIV prevention initiatives.

Key strategic area 3: Devise specific interventions for sub-groups of concern within priority populations

56. Literature generally showed that chemsex was associated with lower drug (anti-retroviral) compliance among PLHIV and increased unprotected sex, which could increase HIV, viral hepatitis C and STI transmission among MSM.[44,45]

- Given the association with high risk behaviour and the practice of chemsex, an integrated and multidisciplinary team approach with existing condom programming, STI and HIV testing, harm reduction strategies, intensified counselling for sexual and mental health together with facilitative linkage to psychological and psychiatric intervention for susceptible individuals is recommended.

- Capacity building activities for staff in drug and HIV field should be maintained to enhance mutual understanding of both issues while there is room for closer collaboration between HIV services and drug related services.

- Drug and AIDS service frontline staff should be aware of the resources available to facilitate early referral for intervention as appropriate.

57. A comprehensive HIV prevention network should not leave anyone behind but to provide equitable, accessible and affordable services to all irrespective of the place of origin.

- Safer sex education, free condom and HIV testing should be offered to subgroups of concern including but not limited to asylum seekers and vulnerable migrants.

- Greater effort should also be made to reach the MSM, PWID and FSW communities among EM who have less access to conventional HIV services.

- In view of the changing landscape of sex work, attention should be paid to people potentially offer sex work through networking over the internet or social media platforms.

- Dialogue with relevant departments on measures to protect the health and rights of sex workers during law enforcement actions should be continued.

Key strategic area 4: Scale up HIV testing services and enhance and support new testing modalities

58. Scaling up HIV testing is one of the crucial strategies to achieve the "first 95" of the HIV treatment and care cascade, by identifying people with HIV who are unaware of their HIV status.

- The conventional **facility-based testing services** such as the voluntary counselling and testing (VCT) services should be maintained; while

- New modalities of testing should be explored to enhance the accessibility. For example, **mobile testing** could provide instant testing opportunities for hard-to-reach communities in the vicinity of their frequented venue.

- The merits of **HIV self-testing** have been well shown during the time of COVID-19 when users could get tested at any time and place they are convenient. Users should obtain self-test kits from reliable sources; and test kits with either CE or FDA approval or prequalified by WHO are preferred. Relevant information should be regularly updated and available to the potential users for choosing

appropriate test kits.

59. In view of the persistently suboptimal HIV testing rate among key populations, greater effort is needed to scale up testing, and to promote universal testing to become a norm for the key communities.

- The SCAS under CHP has published a document to provide recommendations on STI testing for MSM in Hong Kong in November 2020, which reiterated a minimum of annual testing for MSM in general; and 3-monthly for sexually active MSM with other than a stable monogamous relationship.[46] Syphilitic serological testing, and collection of clinical samples for other STIs including gonorrhea and chlamydia should be performed as part of routine protocol for MSM in STI/HIV services. Viral hepatitis screening should also be provided in conjunction to STI screening, at intervals as informed by risk assessment.

- The Committee also recommended that partner notification counselling should tie in with the procedural arrangement of the individual STI/HIV services. In this regard, implementation studies to explore a suitable service model providing integrated one-stop services to offer HIV and STI screening and treatment is considered necessary. Self-collection of STI samples for asymptomatic cases could be an effective additional strategy to increase STI testing uptake.[47]

60. Newly diagnosed people with HIV should be promptly referred to HIV treatment and care services with streamlined mechanism in place to minimise the leakage to subsequent treatment and care services. Similarly people whose HIV rapid test or self-test results are positive should be promptly confirmed and referred if infected. It is also necessary to provide partner counselling and referral services; offering partners HIV and STI testing and treatment or prevention services; and linked to a range of medical, prevention, and psychosocial services for

co-occurring conditions.

61. People whose HIV test results are negative should be informed of and linked to the HIV/STI prevention options which included retesting as needed, and to address other sexual health needs.

62. While misconception about HIV and perceived stigma when accessing HIV services may hinder people to perform testing, health promotion campaign for key populations and the general public should include HIV testing, and updated knowledge of HIV/AIDS including the advancement of anti-HIV treatment and U=U.

Key strategic area 5: Strengthen the HIV treatment and care cascade

63. To enjoy the optimal health outcome attainable with treatment, a PLHIV should be able to access care that is equitable, convenient, humanistic and comprehensive. Equitable access to high quality care is also conducive to retaining patients. The followings are the key issues to be considered when devising a quality HIV treatment and care model for PLHIV:

- <u>Monitor and maintain treatment adherence to achieve undetectable viral load</u>

  Education for health professionals and PLHIV should outline the benefits of achieving an undetectable viral load with a good treatment adherence, including through its role in improving the health and wellbeing of PLHIV and as a preventive measure to protect their sexual partners.

- <u>Enhance surveillance of issues impacting on PLHIV</u>

  Apart from collecting and analysing basic demographics of cases and those lost to follow up (defaulters), regular surveillance of both

qualitative and quantitative data on morbidity and mortality, stigma and discrimination, quality of life measures and HIV drug resistance is recommended and also to explore barriers to medication adherence.

- Prevention targeting HIV positives

  It refers to strategies to educate PLHIV regarding means to reduce the risk of HIV transmission to others, facilitate adherence to treatment and engage them in acknowledging and reducing their risk practices (including sexual and/or substance use behaviours). In practice, a combination of approaches is recommended to enhance prevention efforts, including : (i) partner counselling and referral, (ii) screening for risky behaviours leading to HIV transmission and relevant risk reduction counselling, (iii) screening for substance use (drugs and alcohol) and referral, (iv) drug adherence counselling, (v) screening and treatment of opportunistic and concurrent infections such as tuberculous, (vi) regular screening of STIs and viral hepatitis^, (vii) assessment of mental health and referral, and (viii) addressing inadequacy of mental health and social support that might jeopardise treatment adherence.

  ^ *The "Hong Kong Viral Hepatitis Action Plan 2020-2024" introduces the initiative of micro-elimination of viral hepatitis C (HCV) infection in PLHIV by screening and treating all HIV/HCV co-infected patients, regardless of their disease severity.*

- Multidimensional assessment and multidisciplinary approach for older PLHIV

  Ageing with HIV and the increase in comorbidities require us to ensure that good-quality holistic care continues throughout the life course. For PLHIV approaching older age, such assessment should include evaluation of an individual's functional ability, physical performance, psychosocial factors affecting health, and

assessment of various geriatric syndromes such as polypharmacy, frailty, and risk of fall for tailored intervention; while an integrated, person-centred treatment and care services should be considered to address the problem of multimorbidity. To promote "ageing in place as the core, institutional care as back-up" for elderly as a whole, various community care services and residential care services are provided by Social Welfare Department to support PLHIV. Social support programmes with funding support are in place to assist the needy PLHIV and their families.

- Tailored approaches for vulnerable subgroups

  Treatment and care service should be made accessible and equitable to all including older people, adolescent and pregnant women and people who are ineligible for subsidised health care and medicines and those with complex needs. For instance, peer support may be particularly important for those diagnosed in older age, as many people will have had no previous exposure to PLHIV or HIV-related issues; while escort service to clinics is useful for PLHIV who lives alone and for those who lacks social support.

64. Primary care physicians are important partners in the management of PLHIV in the community, and they could take a role in managing PLHIV in areas such as non-communicable diseases, vaccination, STI testing and treatment, and cancer screening.[48] Diabetes mellitus, hyperlipidaemia and cardiovascular diseases are associated with HIV as well as HAART. Screening and management of these conditions also form part of the primary care aspects of HIV management. To this end, capacity building for primary healthcare professionals should be strengthened.

65. To supplement the basic welfare services to support PLHIV, temporary relief and grants should be in place to help individuals and families of PLHIV to tide over their financial hardship when necessary by

the Social Welfare Department, while disability allowance is indispensable to meet their special needs arising from disability.

Key strategic area 6: Enhance and promote youth sexuality education

66. ACA is aware of the review exercise of the Values Education Curriculum Framework (Pilot Version) (2021)[49] issued by the Curriculum Development Council in response to the recommendation of strengthening school values education by the Task Force on Review of School Curriculum of Education Bureau (EDB).

- One of the key emphases of the EDB review is about promoting the learning elements of sexuality education (including self-understanding, good interpersonal relationships, self-protection, respect for and acceptance of others, etc.).

67. **Comprehensive sexuality education** (CSE) helps improve young people's knowledge about HIV and counters misinformation about sexual and reproductive health.

- It is recommended that sexuality education should not only be confined inside school but out of school involving their parents and peers. HIV-related content should be age-appropriate focusing on sex and relationships by providing scientifically accurate, realistic, nonjudgmental information.[50]

- Apart from instilling knowledge, CSE also provides opportunities to explore one's own values and attitudes and to build decision making, communication and risk reduction skills about many aspects of sexuality. It could also help and support young people to be critical towards misleading information – much of it online and social media – and contradicting messages on sexuality and relationships.

- As online platforms offer huge opportunity for young people to learn about sexuality, digital learning could complement mainstream curriculum-based teaching by offering platforms where some elements of sexuality education could be made more accessible, engaging, and interactive for young people.[51]

68. EDB has been providing a wide array of measures, which included developing learning and teaching resources, providing related training for school teachers, etc. to support schools' implementation. Schools could also invite medical professionals, academia, government departments and NGOs to provide advice and expertise when developing learning and teaching materials, and delivering professional development programmes for teachers.

Key strategic area 7: Reduce and eliminate HIV-related stigma and discrimination

69. Decades of evidence and experience, synthesized in a comprehensive evidence review undertaken by UNAIDS in 2020, show that inequalities is a key reason why the 2020 global targets were missed.[22] The inequalities that underpin stigma and discrimination enhance people's vulnerability to acquire HIV and make PLHIV more likely to die of AIDS-related illnesses.

70. The Constitutional and Mainland Affairs Bureau (CMAB) has been launching programmes to enhance public understanding and knowledge of people of different sexual orientations and gender identities and to foster in the community an inclusive and mutually respectful atmosphere through various channels, including publicity and education, and drawing up a charter on non-discrimination of sexual minorities covering various domains for voluntary adoption by service providers. Training resources have been developed for frontline officers in various fields including healthcare, social work, disciplined services, etc.

71. From the perspective of HIV control, the ACA is of the view that its immediate focus should be on health care settings that is discrimination-free and accepting, facilitating people of different sexual orientations to access HIV and related services.

- Efforts should be sustained to enhance frontline health care workers' understanding of and sensitivity towards sexual minorities for developing positive and non-judgmental attitude towards sexual minority.

- Service providers particularly in the sector of healthcare (including dental and residential care staff and allied health), education, and social welfare should be provided training resources and guidance to ensure that their staff are sensitive to people of different sexual orientations or gender identity when offering services, and also to cultivate a non-discriminatory environment for PLHIV.

72. Public education on HIV knowledge, safer sex and anti-discrimination should be maintained for increasing the self-protection awareness and fostering an accepting environment for PLHIV and people at risk of acquiring HIV. Concerted effort from the Government and AIDS organisations needs to be sustained to promote public awareness of HIV/AIDS and to disseminate correct HIV knowledge through various channels, such as U=U which has multifold potential to accelerate anti-stigma efforts: reduce the stigma and discrimination of PLHIV, alleviate the fear of taking HIV test, and enhance treatment adherence of the PLHIV.

Key strategic area 8: Mobilise the collaboration between Government and the wider society to create changes

73. Ending the HIV epidemic requires concerted effort in a whole-of-society approach:

- Increasing coordination across all sectors of society enables better delivery of services and resources to people with or at risk for HIV.

- Collaboration with community partners is particularly important to developing locally relevant plans for providing testing, prevention, care, treatment, and supportive services, including those that engage people not yet reached by existing programmes and services. Such linkages support development of innovative and tailored interventions that allow for seamless delivery of culturally relevant services to address the various needs of people at any point of care across the health and social services systems.

- Collaboration also involves engaging and building capacity and competencies among partners and communities that are interested in providing HIV services but may not have the opportunity or resources to do so.

- Expanded and strengthened partnerships can better equip communities to respond swiftly and effectively to identify outbreaks of HIV, STIs and/or viral hepatitis.

74. Engaging the key communities is the cornerstone of success of HIV prevention while the role of community opinion leaders, religious bodies, government bodies should be explored. Community-led services with greater involvement of people with/at risk of HIV and their peers could better realise their genuine needs and support the accountability of HIV responses.

75. Primary healthcare providers both in public and private sector, serving the first level of contact with the patients may also contribute by providing prevention services that could extend reach beyond existing services, and also serve to support and care for PLHIV.

76. Service providers also need to be proactive to “come out” as

sexual minority-friendly and further, to provide cultural sensitive service suiting their needs. Training to front-line staff and experience sharing should be continued to raise their awareness on the needs of the community.

77. While the COVID-19 pandemic is still ongoing, the authority and all service providers in the field of HIV should be watchful for the changing landscape of HIV prevention and control as impacted by the pandemic. Close monitoring of the accessibility of testing and treatment services equitable for all in need is warranted. Available data and extensive experience following vaccine administration suggested that current COVID-19 vaccines validated for use by WHO are safe for PLHIV; they should be encouraged to get vaccinated to protect themselves and those around them.[52]

Continued surveillance and monitoring for evaluating HIV responses

78. Strategic information should continue to be collected and analysed through the surveillance system maintained by DH, backed up with thematic surveys, sexual risk behavioural monitoring and prevalence studies. Community-based survey such as PRiSM should be conducted periodically to keep track of the risk behavioural change of the key populations. DH and academic institutions may have a role to provide technical support to organisations in conducting surveys and researches.

79. The authority should keep abreast with researches by local and overseas academia, particularly the field of rapid development such as new HAART and innovation in its delivery, such as long-acting or extended-release injectable drugs.

80. Partnership between local organisations and with regional counterparts such as health authorities in Greater Bay Area should be maintained for information sharing, research collaboration and experience exchange.

81. Regular review of the data collected and timely dissemination of information is equally important for strengthening HIV prevention and control efforts.

Key players in delivering HIV prevention and care programmes

82. Hong Kong's AIDS programme is the organised efforts of different groups and people from different sectors in the society as a whole. The key players who would be working towards the new goals and objectives, and carry out the priority areas of actions include -

Government policy bureau and departments – The Food and Health Bureau is the lead agency in the development of the government's policy on HIV/AIDS. Other bureaux and departments are also involved, e.g. Education Bureau, Security Bureau and Social Welfare Department.

Advisory Council on AIDS – ACA advises the Government on policy relating to AIDS. It also advises on the co-ordination and monitoring of programmes and services on prevention and care of HIV in the territory. It formulates the Recommended Strategies.

AIDS Trust Fund – ATF plays a crucial role in supporting community-based HIV activities, incorporating monitoring and evaluation, and adapting funding support in the face of changed and changing HIV situations and needs.

Department of Health – The Public Health Services Branch of Centre for Health Protection, through its Special Preventive Programme, monitors the epidemiology and provides technical support to health workers and NGOs. Its Red Ribbon Centre is an HIV/AIDS education, resource and research centre, which is the base of HIV Prevention and Health Promotion Team in DH. Other related DH services more involved in HIV programmes include Social Hygiene Service, Tuberculosis and Chest Service, Public Health Laboratory Services Branch, and Methadone Clinics.

Hospital Authority – It is responsible for providing inpatient, out-patient and referral services for PLHIV, and providing surveillance data to DH.

NGOs and vulnerable communities – The NGOs are the key players in delivering targeted prevention to and collecting information from the hard-to-reach populations. They also participate in capacity building, mobilizing and empowering the vulnerable communities. The HKCASO is responsible for coordinating AIDS work conducted by some of the AIDS NGOs.

Healthcare sector – Healthcare providers can play an active role in offering health advice on safer sex and risk reduction, providing HIV testing services, reporting cases to DH, and linking patients to receive HIV treatment and care.

Academia – Academia can contribute by undertaking studies to improve understanding of the situation and specific risk factors/patterns/interventions. They can also develop curriculum on HIV/sexual health in higher education, reduce stigma/discrimination of future service providers towards HIV vulnerable service recipients, promoting HIV prevention, and conduct campaigns to raise awareness on safer sex and substance abuse issues.

The wider society – Numerous other partners can also play key roles in moving the AIDS programme forward, including but not limited to: media, government consultative bodies, district boards, schools, private sector, professional bodies and philanthropic sector.

Annex: Progress review of implementation of 9 time-bound targets of ACA Strategies (2017-2021)

				Target achieved		
Area	**Outcome Indicators**		**Target set**	**First year review (2018)**	**Mid-term review (2020)**	**End-term review (2021)**
Prevention Coverage	% of key populations received free condoms in the past 1 year	MSM	≥60%	47%[a]	56%[c]	41%[e]
		Transgenders (TG)	≥60%	46%[a]	85%[c]	--
		Female sex workers (FSW)	≥90%	84%[b]	75%[d]	--
		People who inject drugs (PWID)	≥90%	79%[c]	88%[d]	76%[e]
	% of key populations (MSM, TG, FSW and PWID) have accessed at least one item of HIV combination prevention services in the last 1 year (such service may include free condoms, HIV testing, free new syringes, HIV prevention messages, or PrEP as appropriate)		≥90%	88% (MSM)[a] 86% (TG)[a] 92% (FSW)[b] 96% (PWID)[c]	86%(MSM)[c] 90% (TG)[c] 87% (FSW)[d] 98% (PWID)[d]	86%(MSM)[e] -- -- 96%(PWID)[e]
	% of key populations received HIV test in the last year and know the result	MSM	≥80%	53%[a]	64%[c]	60%[e]
		TG	≥80%	41%[a]	66%[c]	--
		FSW	≥80%	69%[b]	60%[d]	--
		PWID	≥80%	75%[c]	75%[d]	67%[e]
Protective or risk behaviours	% of key populations with condom use	MSM last anal sex (casual partners)	≥85%	86%[a]	79%[c]	70%[e]
		MSM last anal sex (regular partners)	≥70%	76%[a]	67%[c]	62%[e]
		MSM consistent use in anal sex with both regular and causal partners	≥70%	52%[a]	--	--
	% of PWID shared needles with other people in past 1 month		<10%	12%[c]	11%[d]	20%[e]
	% of PWID reported syringe sharing outside their usual injection partners in the past 1 month		<5%	3%[c]	3%[d]	4%[e]

Table 1. Progress review of implementation of 9 time-bound targets of ACA Strategies (2017-2021) (cont'd)

Area	Outcome Indicators	Target set	First year review (2018)	Mid-term review (2020)	End-term review (2021)
Diagnosis and Treatment	% of People living with HIV (PLHIV) are diagnosed	≥90%	80%[f]	80%[f]	94%[g]
	% who know they are HIV positive are receiving treatment	≥90%	88%[f]	86%[f]	84%[g]
	% who are on HIV treatment have suppressed viral load	≥90%	96%[f]	97%[f]	97%[g]
New infections among children	New infection among locally born children	0	0[h] (2018)	2[h] (2019)	0[h] (2020)

Remarks:

a. Community-based HIV Prevalence and Risk Behavioural Survey of Men who have sex with men (PRiSM) 2017
b. HIV/AIDS Response Indicator Survey (HARiS) 2017
c. HIV/AIDS Response Indicator Survey (HARiS) 2018
d. HIV/AIDS Response Indicator Survey (HARiS) 2019
e. HIV/AIDS Response Indicator Survey (HARiS) 2020
f. HIV treatment cascade using estimates by Asia Epidemic Model (as at end of 2017 and 2018)
g. HIV treatment cascade using estimates by Spectrum (as at end of 2020)
h. Reported HIV/AIDS Statistics 2018, 2019 and 2020

The targets hardly achieved (defined as >5% deviation from the set targets) were shaded for easy reference.

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