MID-TERM REVIEW OF NATIONAL STRATEGIC PLAN FOR ENDING AIDS 2016-2030 AND NATIONAL PLAN OF ACTION FOR ENDING STI BY 2030

Disease Control Division, Ministry of Health Malaysia

Integrated Biological and Behavioural Surveillance (IBBS) Survey 2022

November 2024

©Ministry of Health Malaysia, 2024

Published by:

HIV/STI/Hepatitis C Sector

Disease Control Division

Ministry of Health Malaysia

Block E10, Federal Government Administrative Centre

62590 Putrajaya

MALAYSIA

Available at website: http://www.moh.gov.my

This report is copyrighted. Reproduction and dissemination of its contents in part or in whole for research, educational or non-commercial purposes are authorised with prior written permission and the source of reference is fully acknowledged.

This report was coordinated and produced by HIV/STI/Hepatitis C Sector, Disease Control Division, Ministry of Health Malaysia

Editorial Team:

Dr Fazidah Yuswan, Chief Editor

Dr Mazliza Ramly, Lead Author

Dr Norliza Ibrahim, Editor

Dr Zailatul Hani Md Yadzir, Editor

Cik Norliana Izzati Mohamad Rusli, Editor

Table of Content

Table of Content iii

List of Figures v

List of Tables v

Acknowledgement vi

Acronyms vii

Executive Summary 9

Key Recommendations 10

1 Introduction 16

1.1 Background 16

1.1.1 Ending AIDS by 2030 16

1.1.2 Ending Sexually Transmitted Infections STI by 2030 17

1.2 Rationale of the Report 19

1.2.1 Rationale for integration of Ending AIDS and Ending STIs in the MTR of NSPEA 2016-2030 20

1.3 Methodology of Mid-Term Review of the NSPEA 2016-2030 20

2 Situational Analysis 22

2.1 Overview of the HIV Epidemic in Malaysia, 2014-2022 22

2.2 Shift in transmission patterns 23

2.3 Integrated Bio-Behavioural Surveillance (IBBS) Survey 24

2.4 The Treatment Cascade 95-95-95 26

2.5 Overview of the STIs Epidemic in Malaysia, 2004-2022 26

3 Mid-Term Review of National Strategic Plan 2016-2030 28

3.1 Key Priorities for 'Ending AIDS' 28

3.1.1 Strategy 1: Testing and treatment 28

3.1.2 Strategy 2: Prevention Programme for PWID 34

3.1.3 Strategy 2: Sexual transmission Mitigation 39

3.1.4 Strategy 2: Children, adolescents, and young people (young key population – YKP) 46

3.1.5 Strategy 2: Elimination of Mother-To-Child Transmission (EMTCT) of HIV and Syphilis 49

3.1.6 Strategy 3: Stigma and discrimination (S&D) 51

3.1.7 Strategy 4: Quality Strategic Information and its use through M&E and Research 52

3.2 Strategic Priorities for Ending STIs by 2030: A Comprehensive Action Plan 54

3.2.1 Advocacy, communication and social mobilisation 54

3.2.2 Quality and Coverage of Prevention Programmes 57

3.2.3 Access to Diagnostic, Treatment and Care Services 59

3.2.4 Quality Strategic Information, Monitoring and Evaluation and Research 62

3.2.5 Capacity Building and Enhancement. 65

4 Conclusion 67

5 Main messages from the MTR 68

6 Annexes 70

Annex 1: List of Participants, Consultative meeting, 2 – 5 July 2023 70

Annex 2: Mid-Term Review 2022 73

Annex 3: Indicators for monitoring NSPEA 2016-2030 97

Annex 4: National Plan Of Action For STIs 2024-2030 107

6 References 122

List of Figures

Figure 1: National Strategic Plan for Ending AIDS (NSPEA) 2016-2030 17

Figure 2: The incidence of syphilis, gonorrhoea and chancroid, 2004 – 2022, Malaysia 17

Figure 3: Plan of action for Ending STI by 2030 19

Figure 4: Timeline for the implementation of NSPEA 2016-2030 and the planned review and evaluation intervals. 19

Figure 5: MTR NSPEA 2016-2030 Process 20

Figure 6: HIV epidemic in Malaysia (1986-2030), projected by AEM 2023 22

Figure 7: Reported HIV cases and notification rate, Malaysia, 1986 – 2022 23

Figure 8: Treatment Cascade 95-95-95 progress, Malaysia 2022 26

Figure 9: Syphilis, Gonorrhoea and Chancroid epidemic in Malaysia (2004-2022) 27

Figure 10: Proposed inter-institutional linkage and referral network system for the case management of PWID on treatment 37

List of Tables

Table 1: Vision for Malaysia reaching zero through Ending AIDS (2016-2030) 16

Table 2: Percentage of reported new HIV infections by mode of transmission, Malaysia 1990-2022 23

Table 3: Summary findings of fourth rounds IBBS surveys, 2009-2017 25

Acknowledgement

We wish to formally acknowledge the invaluable contributions of all individuals and organisations involved in the Mid-Term Review of the National Strategic Plan for Ending AIDS (NSPEA) and the National Plan of Action (POA) for Sexually Transmitted Infections (STIs) in Malaysia for 2022.

We extend our deepest gratitude to Dr. Anita Suleiman, former Director of Disease Control, Ministry of Health Malaysia, for her exemplary leadership, strategic guidance, and invaluable feedback, which significantly enhanced the depth and quality of this report.

We also sincerely thank the Ministry of Health Malaysia, State AIDS Officers, civil society organizations, community representatives, and other stakeholders for their steadfast commitment and constructive participation. Their dedication and collaborative efforts have been instrumental in successfully completing this comprehensive review.

The collective contributions of all parties have been vital in evaluating national progress and refining strategies to strengthen efforts to end AIDS and address STIs in Malaysia. We look forward to continued collaboration in advancing this critical agenda.

For a complete list of contributors, please refer to Annex 1.

Acronyms

AEM	Asian Epidemic Model
AIDS	Acquired Immune Deficiency Syndrome
ARV	Antiretroviral
ART	Antiretroviral Therapy
C&C	Cure & Care centres
CBO	Community-Based Organisation
CBT	Cognitive Behavioural Therapy
CCM	Country Coordinating Mechanism
DiC	Drop in Centre
eMTCT	Elimination of Mother-to-Child Transmission
FRHAM	Federation of Reproductive Health Associations Malaysia
FMS	Family Medicine Specialist
FSW	Female Sex Workers
GP	General Practitioners
HIV	Human Immunodeficiency Virus
IBBS	Integrated Bio-Behavioural Surveillance
INTAN	Program Intervensi Anak Negara
JAKIM	Department of Islamic Development Malaysia
JKM	Department of Social Welfare
KK	Klinik Kesihatan
KPWKM	Ministry of Women, Family and Community Development
LPPKN	Lembaga Penduduk dan Pembangunan Keluarga Negara
MAC	Malaysian AIDS Council
MAF	Malaysian AIDS Foundation
MOE	Ministry of Education
MOH	Ministry of Health
MMT	Methadone Maintenance Therapy
MSM	Men who have sex with men
MTCT	Mother-to-child Transmission
MTR	Mid-Term Review
NADA	National Anti-Drug Agency
NGO	Non-Governmental Organisation
NSEP	Needle Syringe Exchange Programme
NSPEA	National Strategic Plan for Ending AIDS
ODP	Orang Dalam Parol
OKP	Orang Kena Pengawasan
ORW	Outreach Workers
OST	Opiate Substitution Therapy
PDRM	Polis Diraja Malaysia
PHFA	Private Healthcare Facilities Act
PITC	Provider Initiated Testing and Counselling
PLHIV	People living with HIV
POTC	Point-of-care Testing
PrEP	Post-exposure Prophylaxis
PPDa	Drug Education and Prevention
PWID	People who inject drugs

PWUD	People who use drugs
RTK	Rapid Test Kits
SDG	Needle Syringe Exchange Programme
TGW	Transgender women
TOT	Training of Trainers
TRIP	Rapid ART Initiation Protocol
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organization

Executive Summary

The Mid-Term Review (MTR) of Malaysia's National Strategic Plan for Ending AIDS (NSPEA) 2016-2030 evaluates the progress towards achieving the 2030 targets, explicitly focusing on the UNAIDS 95-95-95 goals. These goals aim to ensure that 95% of people living with HIV (PLHIV) are diagnosed, 95% of those diagnosed are on antiretroviral therapy (ART), and 95% of those on ART achieve viral suppression.

Key findings reveal a significant shift in Malaysia's HIV transmission patterns, transitioning from injecting drug use to sexual transmission, especially among key populations such as men who have sex with men (MSM), transgender women (TGW), and women at risk (WAR). Although Malaysia has made notable progress in scaling up HIV testing and treatment, challenges remain in reaching hidden populations and improving treatment uptake, particularly among young key populations and individuals in prison.

The MTR underscores the importance of targeted prevention strategies, including harm reduction for people who inject drugs (PWID), sexual transmission mitigation, and improved access to care for adolescents, young people, and pregnant women at risk of mother-to-child transmission. It also highlights the need for stigma reduction, better management of HIV cases in prisons, and enhanced coordination between healthcare services.

The review integrates efforts to end sexually transmitted infections (STIs) by 2030, with a focus on advocacy, social mobilisation, and expanding access to diagnostic, treatment, and care services. The review emphasizes the need for strengthening monitoring and evaluation and capacity building to support healthcare workers and community-based organisations.

In conclusion, the MTR identifies critical areas that require intensified efforts to achieve the goal of ending AIDS by 2030. These include scaling up testing and treatment services, mitigating sexual transmission risks, enhancing support for vulnerable populations, and addressing the persistent stigma and discrimination surrounding HIV/AIDS and STIs.

Key Recommendations

The MTR team has prioritized the recommendations using three broad categories: Priority 1: high priority; Priority 2: medium priority; and Priority 3: lower priority. The MTR team ranks all recommendations included in this section on 'Key Recommendations' as priority 1. However, not all recommendations have been included in this key recommendations section, as not all priority-one recommendations are of equal importance.

All of the recommendations in these key recommendation sections are repeated in the relevant sections of the main body of the report.

I. MTR NSPEA 2022

Strategy 1: Testing and Treatment

Recommendations	Priority
Unified testing guidelines	
To use 4th generation HIV tests to initiate ART while awaiting confirmation and incorporating case management and treatment protocols in the forthcoming Malaysian Consensus Guideline on ARV Therapy.	**1**
Provider-initiated testing and counselling services	
Revise the guideline to enhance PITC services with improved triage procedures and comprehensive pre-and post-test counselling	**1**
Transition to tenofovir disoproxil fumarate, lamivudine and dolutegravir (TLD) as the first-line treatment regime	
Adoption of the tenofovir disoproxil fumarate (TDF), lamivudine, and dolutegravir (TLD) combination as the preferred first-line regimen for initiating antiretroviral therapy (ART) in adults and adolescents with HIV as recommended by WHO.	**1**
Testing gaps (in young KP)	
To advocate for legislative reform to allow younger individuals access to testing and treatment alongside targeted outreach and educational efforts.	**1**
Management of HIV cases in prison	
To implement new mechanisms like the MyHCC platform for seamless medical record transfers, enhance the TEMAN Program for post-release care, and ensure consistent antiretroviral therapy availability.	**1**

Strategy 2: Prevention Programme for PWID

Recommendations	Priority
Defining and expanding the scope of drug use intervention	
To expand access to oral substitution therapy (OST) beyond methadone and promote it through general practitioners and pharmacies. Easier and broader access to One Stop Centres for Addiction (OSCAs) is necessary, especially for those under surveillance or on parole.	**1**
Linkages and referral systems for continuity of care	
Consider involving General Practitioners (GPs) in the methadone program and expanding it to community pharmacies. Integrating harm reduction into police and prison training, enhancing prison staffing, and implementing processes like pre-release training and appointing outreach workers are essential steps to improve management and support for PWID.	**1**
Renewing engagement with partner institutions	
To renewed commitment and collaboration to overcome ongoing challenges. Knowledge-sharing sessions among key stakeholders, including NGOs, the National Anti-Drug Agency (NADA), and the Prison Department are crucial to addressing stigma, improving methadone services, and linking individuals to care.	**1**
Scaling-up uptake of OST and treatment services	
Health clinics must review their operational hours to improve accessibility, and selected NGOs should be empowered to provide OST services.	**1**

Strategy 2: Sexual transmission Mitigation

Recommendations	Priority
MSM: Harm reduction interventions for chemsex or chemfun	
Proposed interventions include developing a web tool for assessing drug interactions, distributing harm reduction packs, and collaborating with organizations to provide resources and support to those involved in chemsex.	**1**
MSM: Social media campaign	
To review and set realistic targets while ensuring technical proficiency in campaign design. Developing a new, dedicated web-based resource centre is recommended.	**1**
WAR: Reach out for WAR	
Engaging with establishments like spas and reflexology centres through partnerships with local councils can help healthcare workers deliver vital interventions.	**1**
WAR: Mapping strategies	
The project manager should proactively visit and map areas where FSW and WAR are likely to be found, using both physical outreach and online strategies to engage these populations.	**1**
TGW: Enhancing Outreach and Mapping Efforts for Transgender Communities	
To effectively provide HIV/STI prevention and support services, comprehensive mapping of the transgender community is crucial for better identification and population estimation.	**1**

TGW: Stigma and discrimination towards TGW	
For transgender individuals who are also injecting drug users, it is crucial to provide access to appropriate prevention programs and connect them with community-based organizations.	**1**

Strategy 2: Children, adolescents, and young people (young key population – YKP)

Recommendations	Priority
Enhancing the delivery of curriculum and co-curriculum related to HIV education and awareness in school	
a) Provide comprehensive training for teachers on HIV/AIDS prevention and sexual and reproductive health (SRH), along with effective HIV counselling skills. b) Establishment of a Task Force: Form a dedicated Task Force, such as the National Youth Technical Meeting, focusing on HIV/STI, drug abuse, and reproductive health. c) Promotion of School Activities: Encourage schools to conduct various activities and programs related to health education during school assemblies. d) Strengthen and expand existing programs like PROSTAR 2.0, designed to promote healthy behaviours and prevent risky practices among students. e) Development of Digital Health Education Materials	**1**
Access to HIV and STI testing for young key population	
a) The leegal age for HIV testing should be lowered from 18 to a younger age to improve early detection among young people. b) To consider developing an online platform for STI self-care, including condom distribution, STI awareness, and self-sampling for HIV and HCV testing	**1**
Interactive and multimedia campaign to reach out to adolescents and young people	
The Ministry of Health and related government bodies should modernize their communication strategies by utilizing social media platforms like TikTok, Instagram, YouTube, and Facebook for health promotion.	**1**

Strategy 2: EMTCT

Recommendations	Priority
Improving turnaround time for HIV RNA PCR testing	
To decentralize testing services regionally, which can be managed through the MyHIV Care Cascade (MyHCC) Registry.	**1**
Review of charges for PMTCT services for immigrants, refugees and asylum seekers	
Review and potentially reduce charges for diagnosis and treatment, including services for immigrants, refugees, and asylum seekers, to ensure comprehensive access to PMTCT (Prevention of Mother-to-Child Transmission) services.	**1**

Strategy 3: Stigma and discrimination

Recommendations	Priority
Expansion of the S&D pilot study	
Expansion and strengthening the national S&D program with the HOPE Module and utilizing open-ended feedback approaches is recommended.	**1**
To explore possibilities of making the S&D as one of the National Indicator Approaches (NIA)	
To develop a National Policy on stigma and discrimination (S&D) and make it a National Indicator Approach (NIA).	**1**

II. Plan of Action to End STIs by 2030

Strategy 1: Advocacy, communication and social mobilization

Recommendations	Priority
Increase awareness of STIs and their symptoms, and encourage seeking early treatment.	
Ensure that the public, especially high-risk populations, are well-informed about the symptoms of STIs and the importance of early diagnosis and treatment.	1
Health education activities in healthcare, community, and other settings to normalize the dialogue about sexual health.	
Foster an environment where talking about sexual health, including STIs, becomes a routine and accepted practice in all areas of life.	1
Information and age-appropriate education campaigns	
Provide tailored, accurate, and age-appropriate information on sexual health and STI prevention for different age groups.	1
Address stigma and discrimination	
Reduce the stigma surrounding STIs and encourage individuals to seek treatment without fear of judgment or discrimination.	1
Introduce various methods for self-care strategies, self-collection of specimens, teleconferencing, and online appointments to reduce barriers to accessing STI services	
Empower individuals to take control of their sexual health by providing innovative, accessible options for diagnosis and treatment.	2

Strategy 2: Quality and Coverage of Prevention Programmes

Recommendations	Priority
Strengthening screening activities for STIs among key populations	
Increase the reach and frequency of STI screening for key populations at higher risk of infection.	1
Strengthening screening activities for STIs among vulnerable populations, especially antenatal mothers, sexual partners, people on PrEP, Orang Asli, Bumiputra Sabah and Sarawak	

Ensure that vulnerable populations receive regular and accessible STI screening, with a focus on preventing mother-to-child transmission and protecting high-risk individuals.	1
Strengthening screening activities for STIs among the general population, especially blood donors, to ensure blood safety and reduce transfusion-transmissible infections	
Implement robust screening programs in the general population, particularly among blood donors, to prevent the transmission of STIs through blood transfusion and promote public health safety.	1
Availability of accurate Point-of-Care Tests (POCT)	
Ensure that point-of-care tests (POCT) for STIs are widely available and utilized for rapid, accurate diagnosis and immediate treatment.	1
Availability of newer screening tests for various STIs	
Introduce and make available advanced screening technologies for various STIs to improve the accuracy and comprehensiveness of diagnostics.	1

Strategy 3: Access to Diagnostic, Treatment and Care Services

Recommendations	Priority
Improve coverage and early access to STI diagnostic tests, treatment, and care at primary care, hospitals, and private sectors	
Ensure that individuals can easily access STI diagnostic services and treatment across all healthcare settings	1
Regularly update case management guidelines to reflect advances in treatment, diagnostics, and development of resistance to medicines	
Ensure that healthcare providers use the most up-to-date information for diagnosing and treating STIs.	1
Scale up syndromic management approach in primary healthcare	
Enhance the ability of primary healthcare providers to manage STIs based on the symptoms presented by the patient, even in the absence of laboratory diagnostics.	1
Expedite partner treatment and voluntary provider-assisted referral of sexual partners	
Prevent the reinfection of treated individuals by ensuring that their sexual partners also receive timely treatment.	1
Ensure availability of medicine and adherence to treatment	
Ensure continuous availability of medications and promote adherence to treatment regimens to prevent complications and the development of drug resistance.	1
Innovate contact tracing	
Modernize the contact tracing system to improve the identification of individuals at risk and reduce transmission.	2

Strategy 4: Quality Strategic Information, Monitoring and Evaluation and Research

Recommendations	Priority
Strengthen STI notification from primary health clinics, private GPs, government and private hospitals	
Strengthen STI notification from primary health clinics, private GPs, government and private hospitals	1

Develop case investigation forms for STIs that can be used for appropriate public health measures	
Create standardized forms allowing comprehensive case investigations, supporting more effective contact tracing, outbreak control, and public health interventions.	1
Develop a monitoring and evaluation framework that complements the NPSTIs (National Plan for STIs) objectives, strategies, and targets set from baseline and ending STIs by 2030	
Establish a robust monitoring and evaluation (M&E) system to track the progress of STI control efforts and assess the effectiveness of interventions.	1
Promote and support research and partnerships in order to move towards evidence-based STI response	
Foster innovation and ensure that STI prevention, diagnosis, and treatment strategies are grounded in the latest scientific evidence.	1

Strategy 5: Capacity Building and Enhancement.

Recommendations	Priority
Strengthen capacity building and knowledge about managing STIs among healthcare providers	
Equip healthcare providers (doctors, nurses, pharmacists, and allied health workers) with up-to-date knowledge and skills for effective STI diagnosis, treatment, and prevention.	1
Improve knowledge of NGO Community Health Workers (CHWs) on STIs for adequate and correct dissemination of information to the community	
Enhance the capacity of NGO Community Health Workers (CHWs) to effectively communicate accurate and relevant information about STIs to the community, especially vulnerable and high-risk populations.	1

1 Introduction

1.1 Background

1.1.1 Ending AIDS by 2030

In line with the Sustainable Development Goals (SDG), the National Strategic Plan for Ending AIDS (NSPEA) 2016-2030 [1] adopted the UNAIDS strategic guidance on Ending AIDS by 2030 [2]. The 95-95-95 targets specify that by 2030, i) 95% of all people living with HIV (PLHIV) will know their HIV status; ii) 95% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy; and iii) 95% of all people receiving antiretroviral therapy will have viral suppression [3]. Table 1 lists the targets that Malaysia adopted.

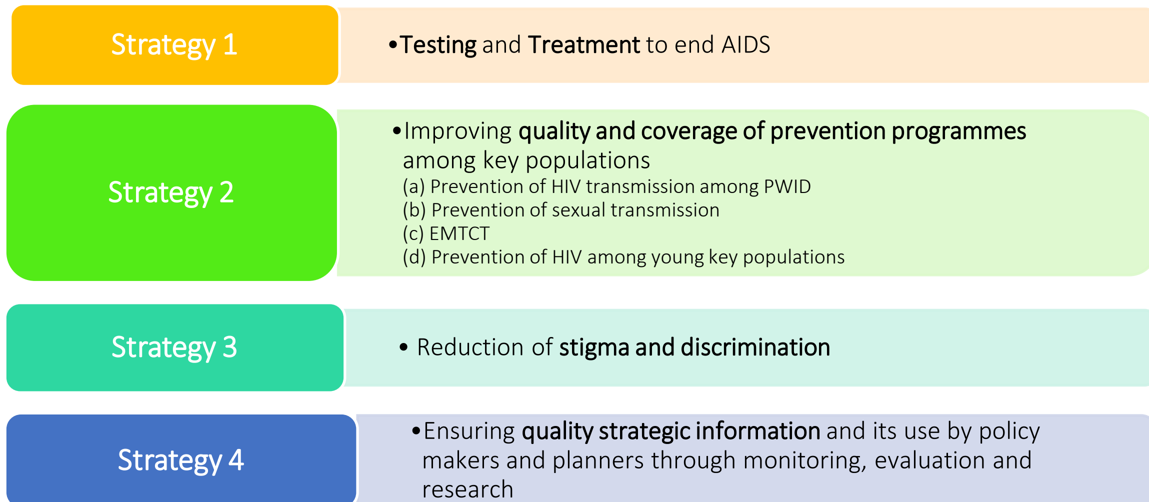
Table 1: Vision for Malaysia Reaching Zero through Ending AIDS (2016-2030)

Vision	**Zero new infections – Zero discrimination – Zero AIDS-related deaths**
Goal	ENDING AIDS by 2030
Targets	95% of KPs tested for HIV and know their results
	95% of PLHIV receive ART
	95% of people on ART achieve viral suppression
	90% of key populations are reached by prevention services
	Elimination of vertical transmission of HIV (<2%)

The efforts to implement the NSPEA involve fully operationalising and effectively implementing national, subnational, and local development plans. Resources are mobilised through innovative mechanisms that ensure effectiveness and efficiency, people engagement at various levels, and effective development cooperation at the government, civil society, private sector, international institutions, and individual levels.

The National Strategic Plan for 2016-2030 places testing and treatment at the forefront of national response towards the aim of ending AIDS, supported by continued and intensified targeted prevention strategies for key populations identified to be at higher risk of HIV and AIDS. Figure 1 presents a summary of the four key strategies identified and committed.

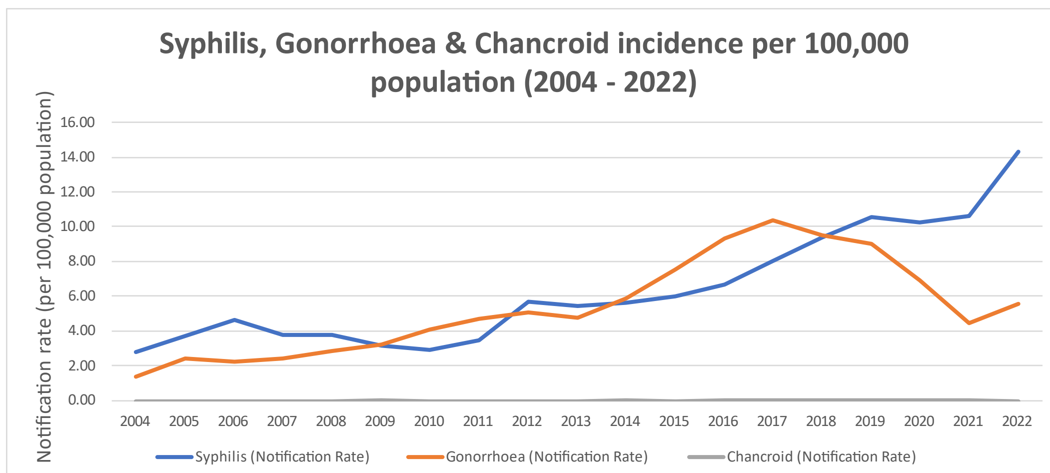
Figure 1: National Strategic Plan for Ending AIDS (NSPEA) 2016-2030



1.1.2 Ending Sexually Transmitted Infections STI by 2030

Sexually transmitted infections (STIs) remain a significant public health challenge in Malaysia, affecting young adults and key populations such as men who have sex with men (MSM), transgender women (TGW), and sex workers or women at risk (WAR). Despite notable progress in HIV prevention and control, the incidence of STIs—particularly syphilis and gonorrhoea—has been steadily increasing over the past decade (Figure 2). Contributing factors include high-risk sexual behaviours, inconsistent condom use, and gaps in comprehensive sexual health education.

Figure 2: The incidence of syphilis, gonorrhoea and chancroid, 2004 – 2022, Malaysia



An emerging concern in the fight against STIs is antimicrobial resistance (AMR), particularly in treating gonorrhoea, which has diminished the efficacy of standard treatment protocols. The AMR complicates STI management and increases the risk of long-term health complications, including infertility and heightened vulnerability to HIV infection.

While Malaysia has made significant strides in the HIV/AIDS response since the first reported HIV case in 1986, progress in controlling STIs has been slower. Despite numerous WHO guidelines and recommendations for public health strategies and targets, there is no specific national strategic plan for STIs. Nonetheless, in the absence of a formal STI-specific plan, STI prevention and control has been integrated into HIV/AIDS programs for over three decades to address key organisms like Neisseria gonorrhoeae, Treponema pallidum, and Human papillomavirus, aligning with existing initiatives such as the National Strategic Plan Ending AIDS (2016-2030).

The STI plan of action is structured around five key strategies, each designed to address a critical component in achieving the overarching objectives (Figure 3). Together, these strategies form a comprehensive approach, addressing the multifaceted challenges through advocacy, service provision, data management, and capacity enhancement.

Figure 3: Plan of action for Ending STI by 2030

1.2 Rationale of the Report

The National Strategic Plan on Ending AIDS 2016-2030, published in 2015, committed to conducting a mid-term review of the implementation of the first fast-tracking period of 2016-2020 in 2018. Figure 4 presents the timeline for the implementation and review processes of the NSPEA 2016-2030.

Figure 4: Timeline for implementing NSPEA 2016-2030 and the planned review and evaluation intervals.

National Strategic Plan on Ending AIDS 2016 - 2030			
Preparation	7-year period	Final 7-year period	
2015	2016 2023	2024 2028	2030
Publication of NSPEA 2016 - 2030			
	Mid-term Review 2016 - 2030		
		Evaluation of final 5-year period	
			Final evaluation 2030

1.2.1 Rationale for Integration of Ending AIDS and Ending STIs in the MTR of NSPEA 2016-2030

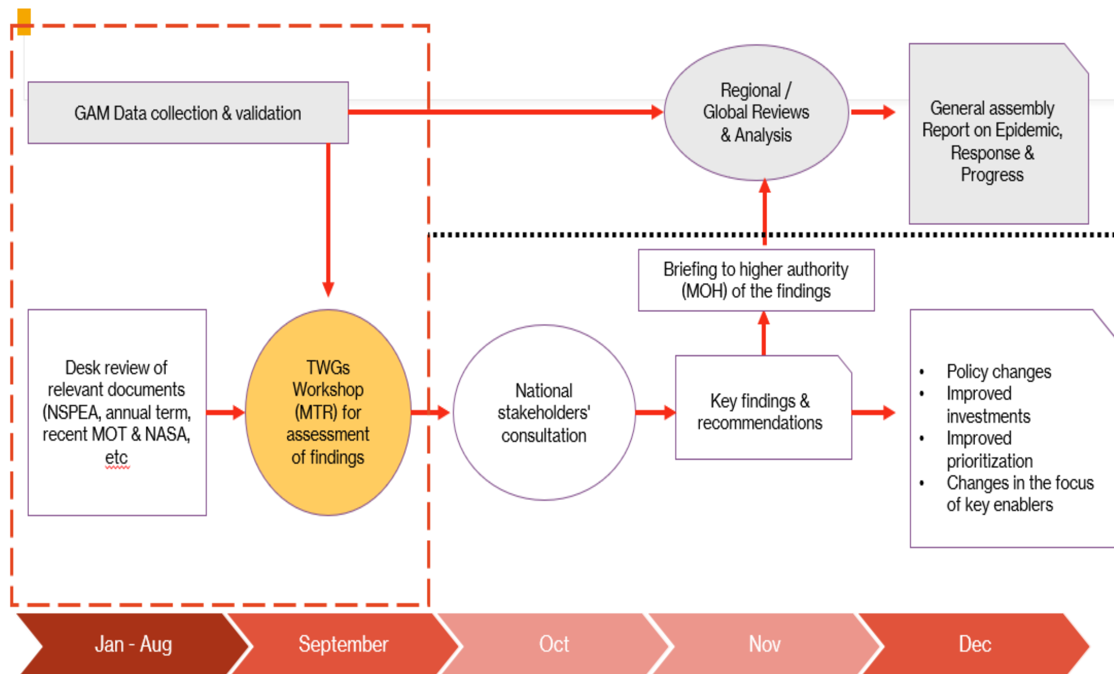
HIV and STIs affect overlapping population groups and interact synergistically, contributing to a higher burden of disease. They share common determinants, interventions, and service delivery approaches. Recognising these synergies, the MTR has, for the first time, consolidated strategies for both HIV and STIs into a single framework. This integration promotes a unified approach to addressing both epidemics, placing people at the centre of the response and emphasising the vital role of the health sector in achieving universal health coverage and the 2030 Sustainable Development Agenda. Incorporating STI action plans into Malaysia's national strategic plan for Ending AIDS is a crucial step toward a more comprehensive and effective public health strategy. By aligning resources and efforts and fostering collaboration among stakeholders, Malaysia can better reduce the burden of both HIV and STIs, improving health outcomes and the overall well-being of its population.

1.3 Methodology of Mid-Term Review of the NSPEA 2016-2030

The Mid-Term Review of the NSPEA evaluates whether the national program is effectively progressing in the right direction and remains on track to achieve the targets outlined in the NSPEA. The initial NSPEA report, published in 2015, established situational analyses and targets based primarily on data and projections from 2014. This mid-term review highlights observed changes using updated data gathered over the past seven years of NSPEA implementation. It also examines the latest progress in service delivery (outputs) and the utilisation of these services by target populations (outcomes).

Where necessary, the review serves as a platform to reprogram or adjust the Strategic Plan by modifying targets, redefining target populations, or revising intervention strategies. Figure 5 illustrates the processes involved in the 2023 Mid-Term Review. This consultative process engages stakeholders, including the Ministry of Health, the Malaysia AIDS Council (MAC), the Malaysia AIDS Foundation (MAF), various NGOs, the Global Fund Country Coordinating Mechanism (CCM), and other relevant departments involved in HIV program implementation (refer to Annex 1 for the list of participants).

Figure 5: MTR NSPEA 2016-2030 Process



2 Situational Analysis

2.1 Overview of the HIV Epidemic in Malaysia, 2014-2022

In 2022, an Asian Epidemic Model (AEM) projection conducted in 2023 estimated that 86,142 adults were living with HIV (refer to Figure 6). For the first 25 years of the HIV epidemic in Malaysia, the primary mode of transmission was through injecting drug use, specifically through the sharing of contaminated needles and syringes among people who inject drugs (PWID). By the start of the NSPEA in 2014, however, the share of new infections attributed to sexual transmission had increased to close to 80% of the annual total. The epidemic, however, was still concentrated within key populations.

Figure 6: HIV epidemic in Malaysia (1986-2030), projected by AEM 2023

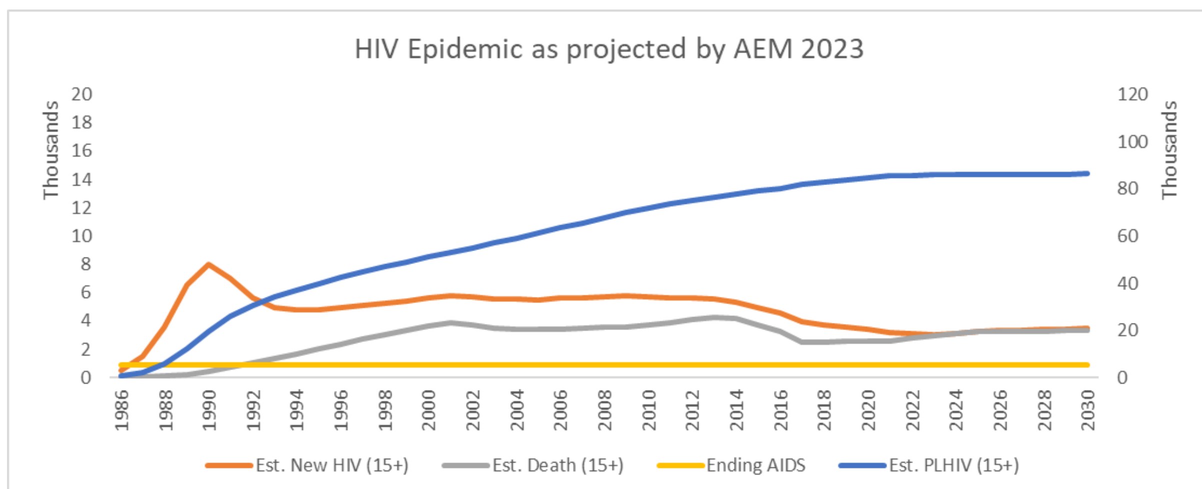
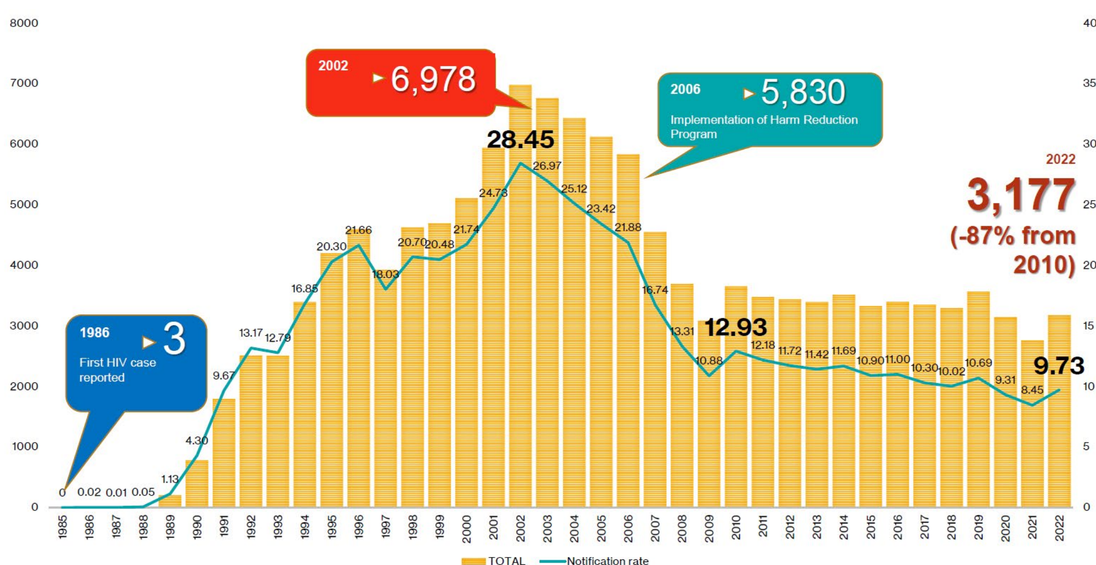


Figure 7 shows the annual number of reported HIV and AIDS cases. Since the peak at 6,978 new HIV cases reported in 2002, the annual number of newly reported HIV cases has been on a steady decline until reaching a plateau since 2010. In 2022, the Ministry of Health received reports of 3,177 newly detected HIV cases, representing a 50% reduction compared to the figures reported in 2002. The notification rate of HIV continued to decline, dropping from 28.4 per 100,000 population in 2002 to 9.73 per 100,000 population in 2022.

Figure 7: Reported HIV cases and notification rate, Malaysia, 1986 – 2022



2.2 Shift in Transmission Patterns

PWID used to comprise the highest percentage of diagnosed HIV cases in Malaysia since the 1990s. However, since the introduction of harm reduction strategies for injecting drug users, there has been a shift in the mode of transmission from injecting drug use to sexual transmission. In 2022, only 2.4% of newly diagnosed HIV cases were transmitted through injecting drug use (Table 2). This translated to a declining trend of HIV prevalence among PWID, from 22.1% in 2009 to 13.4% in 2017 (IBBS). In 2017, there were an estimated 118,908 PWID in Malaysia.

Table 2: Percentage of reported new HIV infections by mode of transmission, Malaysia 1990-2022

Mode of transmission	1990	2000	2010	2014	2022
Injecting drug use	470 (60.4%)	3,815 (74.7%)	1,737 (47.6%)	680 (19.3%)	74 (2.4%)
Sexual transmission	41 (5.3%)	964 (18.9%)	1,773 (48.5%)	2,752 (78.3%)	3,033 (95.5%)
- Heterosexual	38 (4.9%)	902 (17.7%)	1,472 (40.3%)	1,768 (50.3%)	1,140 (35.9%)
- Homosexual	3 (0.4%)	62 (1.2%)	301 (8.2%)	984 (28.0%)	1,893 (59.6%)

2.3 Integrated Bio-Behavioural Surveillance (IBBS) Survey

The summary findings from the IBBS surveys (2009-2022) highlight trends in HIV and syphilis prevalence, as well as associated risk behaviours among key populations, including MSM, PWID, FSW, and TGW, as depicted in Table 3.

HIV prevalence among MSM increased from 3.9% in 2009 to 12.9% in 2022, alongside behavioural changes such as a rise in condom use with recent partners (from 55.6% to 75.0%) and testing rates (from 41% to 80.8%). Among PWID, HIV prevalence declined sharply from 22.1% in 2009 to 7.5% in 2022, likely aided by increased needle exchange services and higher condom use rates. Syphilis prevalence among this group remained low (0.7% in 2022).

For FSW, HIV prevalence showed a decline from 10.5% in 2009 to 1.9% in 2022, with syphilis rates remaining consistently low. Meanwhile, TGW exhibited a fluctuating HIV prevalence, peaking at 10.7% in 2017 before decreasing to 5.9% in 2022. Condom use among TGW also improved, reaching 99.8% in 2022, and syphilis prevalence stood at 5.7%.

Overall, these trends reflect significant improvements in risk-reducing behaviours, such as condom use and HIV testing, particularly among PWID and TGW, contributing to the overall decline in HIV prevalence.

Table 3: Summary findings of fourth rounds IBBS surveys, 2009-2017

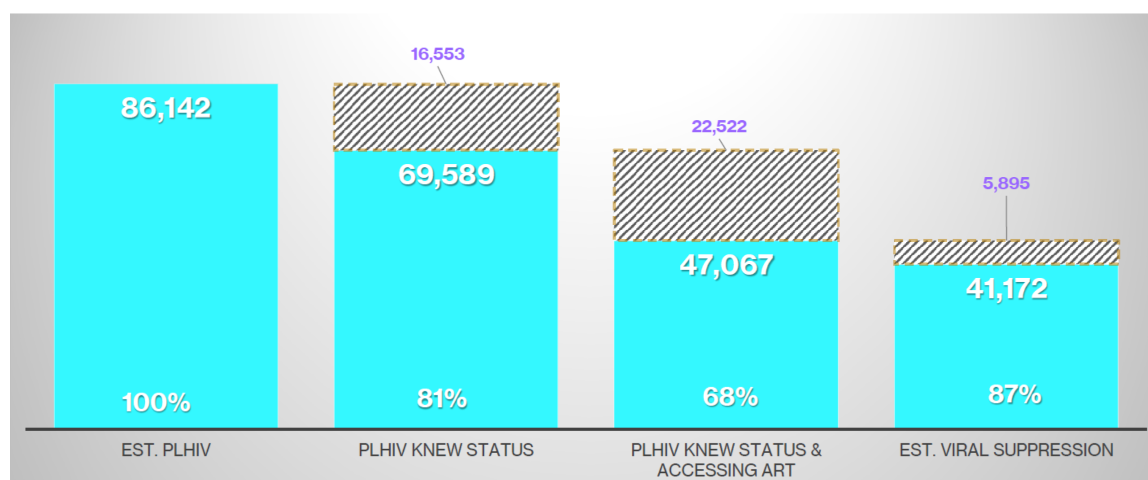
People Who Injecting Drug (PWID)	**2009 (n=630)**	**2012 (n=1906)**	**2014 (n=1,445)**	**2017 (n=1,413)**	**2022 (n=824)**
HIV prevalence	22.1%	18.9%	16.3%	13.4%	7.5%
Tested in the past 12 months and knew results	60.8%	64.5%	37.8%	38.9%	76.9%
Duration of risk behaviour (median year)	8	11.7	15	25	18
Used sterile needle during last injection	83.5%	97.5%	92.8%	79.5%	96.9%
Condom use with most recent partner	19 - 58%	26.7%	28.0%	25.7%	10.0%
Knowledge on modes of transmission	49.7%	53.8%	58.3%	54.4%	73.7%
Received N/S in the past 12 months	27.0%	86.5%	75.3%	70.8%	90.4%
Know where to get HIV test	NA	86.5%	84.2%	NA	NA
Syphilis prevalence	NA	NA	NA	NA	0.7%
Female sex workers (FSW)	**2009 (n=551)**	**2012 (n=864)**	**2014 (n=839)**	**2017 (n=630)**	**2022 (n=483)**
HIV prevalence	10.5%	4.2%	7.3%	6.3%	1.9%
Tested in the past 12 months and knew results	46.1%	32.8%	49.4%	35.1%	50.9%
Duration of risk behaviour (median year)	NA	6	7	24	23
Condom use with most recent client	60.9%	83.9%	84.5%	83.5%	93.8%
Injecting drugs	5.6%	4.1%	7.2%	6.0%	2.1%
Used narcotics before sex	38.5%	20.8%	33.8%	34.3%	23.6%
Consumed alcohol before sex	35.9%	39.9%	46.2%	34.0%	41.6%
Knowledge on modes of transmission	38.5%	35.4%	39.2%	41.0%	60.2%
Received free condom in the last 12 months	NA	57.8%	57.4%	40.6%	60.7%
Syphilis prevalence	NA	NA	NA	NA	1.0%
Men who have sex with men (MSM)	**2009 (n=529)**	**2012 (n=365)**	**2014 (n=531)**	**2017 (n=682)**	**2022 (n=1047)**
HIV prevalence	3.9%	7.1%	8.9%	21.6%	12.9%
Tested in the past 12 months and knew results	41%	47.1%	40.9%	NA	80.8%
Duration of risk behaviour (median year)	NA	7	7	19	20
Condom use with most recent partner	55-63%	74.0%	56.7%	65.4%	75.0%
Injecting drugs	6%	3.6%	2.8%	4.4%	0.9%
Used narcotics before sex	23.8%	14.5%	26.9%	19.4%	7.8%
Consumes alcohol before sex	23.2%	33.8%	45.8%	32.1%	10.6%
Knowledge on modes of HIV transmission	NA	44.5%	47.9%	49.6%	77.6%
Received free condom in the last 12 months	NA	52.9%	32.0%	36.1%	63.2%
Syphilis prevalence	NA	NA	NA	NA	7.1%
Transgender persons (TG)	**2009 (n=540)**	**2012 (n=870)**	**2014 (n=1247)**	**2017 (n=889)**	**2022 (n=523)**
HIV prevalence	9.3%	4.8%	6.3%	10.7%	5.9%
Tested in the past 12 months and knew results	48.6%	35.5%	46.7%	43.0%	80.7%
Duration of risk behaviour (median year)	NA	7	11	16	17
Sex worker	83.7%	83.8%	86.6%	80.0%	28.3%
Condom use with most recent client	67 - 95%	72.5%	81.2%	83.3%	99.8%
Injecting drugs	3.1%	2.5%	2.8%	3.8%	0.2%
Used narcotics before sex	32.8%	22.0%	24.1%	23.2%	8.2%
Consumed alcohol before sex	35.9%	38.1%	39.5%	28.5%	28.1%
Knowledge on mode of HIV transmission	37.2%	40.6%	38.9%	47.1%	86.8%
Received free condom in the last 12 months	NA	74.4%	66.3%	59.6%	92.5%
Syphilis prevalence	NA	NA	NA	NA	5.7%

2.4 The Treatment Cascade 95-95-95

UNAIDS 95-95-95 targets refer to 95% of people living with HIV to be diagnosed by 2030: 95% of diagnosed people to be on antiretroviral treatment by 2030, and 95% of people in treatment with fully suppressed viral loads by 2030. Figure 8 shows Malaysia's current progress in achieving the targets of 95-95-95, and the gaps between targets and actual achievements. In 2022, there was an estimated 86,142 PLHIV, with 3,177 new infections, 47,067 people on ART, and 1,410 deaths related to AIDS. Data also shows that out of the estimated 86,142 PLHIV, 69,589 persons (or 81%) knew their HIV status, and out of this, 47,067 (68%) of them who know their status are accessing ART. As of that year, for those who are on ART, 87% or 41,172 persons are under viral suppression status.

The treatment uptake among people diagnosed with HIV appears to be somewhat low (68%), suggesting a massive gap in the HIV treatment and care cascade.

Figure 8: Treatment Cascade 95-95-95 progress, Malaysia 2022

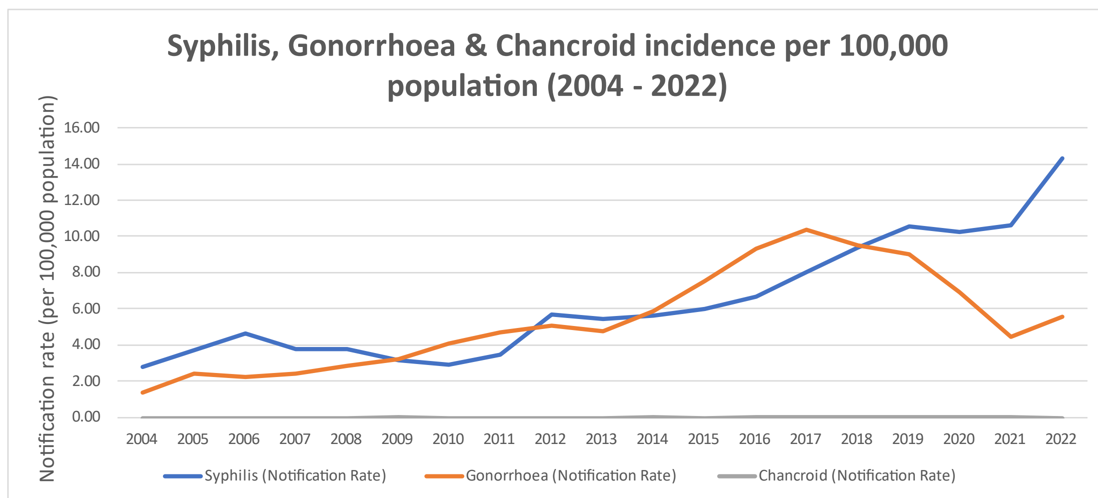


2.5 Overview of the STIs Epidemic in Malaysia, 2004-2022

Over the past three decades, Malaysia has made considerable efforts in preventing and controlling HIV, leading to a marked reduction in the virus's spread across the country. However, the trends for other notable STIs—namely chancroid, gonorrhoea, and syphilis—have varied considerably. The incidence rate of chancroid remained relatively stable, fluctuating between 0 and 0.02 per 100,000 population from 2004 to 2022 (Figure 9).

In contrast, gonorrhoea and syphilis showed significant upward trends. The incidence rate of gonorrhoea increased from 1.4 per 100,000 population in 2004 to 5.6 per 100,000 population in 2022. Similarly, syphilis cases nearly quadrupled, with the incidence rate rising from 2.8 per 100,000 population in 2004 to 14.3 per 100,000 population in 2022. Notably, young people aged 20-39 years accounted for 67% of new syphilis cases and 78% of new gonorrhoea cases in 2022, mirroring the age distribution of new HIV infections.

Figure 9: Syphilis, Gonorrhoea and Chancroid epidemic in Malaysia (2004-2022)



Malaysia must intensify efforts to control the spread of STIs to align with the Global Health Sector Strategy 2022-2030, which targets key infections of global significance—syphilis (Treponema pallidum), gonorrhoea (Neisseria gonorrhoeae), chlamydia (Chlamydia trachomatis), and HPV (Human papillomavirus). The Ministry of Health faces growing challenges in STI prevention and control, necessitating sustainable programmes that complement established HIV initiatives. Another critical concern in STIs is the ability of pathogens to develop antimicrobial resistance, posing a significant barrier to STI control. Some resistant strains and emerging pathogens are becoming major causes of morbidity and are facilitating both STI and HIV transmission. Enhancing local surveillance programs to detect antimicrobial resistance is crucial in addressing these challenges.

3 Mid-Term Review of National Strategic Plan 2016-2030

3.1 Key Priorities for 'Ending AIDS'

3.1.1 Strategy 1: Testing and Treatment

The most recent findings regarding Malaysia's progress on the targeted 95-95-95 treatment cascade brought to light a substantial gap in HIV testing and treatment service coverage and uptake among people living with HIV. The issue is two-fold: the first is a social healthcare-seeking behavioural factor where the majority of PLHIV belong to key populations that remain hidden and are not accessing existing HIV screening and testing services within the conventional (government) healthcare settings thus, they remain undiagnosed; and the second is likely to do with operational factors within the healthcare delivery system, where complex procedures and delays in case management (such as the referral system or linkage to care, confirmatory testing, treatment initiation and ARV provision) result in a large proportion of those tested positive for HIV to be lost to care.

Recommendation:

i. Unified testing guidelines

According to the updated Surat Pekeliling KPK Bil 10, 2020 'Kemaskini Carta Alir Ujian Saringan dan Pengesahan HIV', it is now recommended to use 4th generation tests and clinical response to start ART (antiretroviral therapy) while waiting for confirmation test results. It is advised that case management guidelines should be included in the MASHM (Malaysian Society of HIV Medicine) consensus, even though the current testing and confirmation algorithm remains unchanged and valid. The unified testing guideline, which includes the testing decision, algorithm and self-test, should be published in the Testing & Counseling Guideline in HIV. Additionally, the latest updated Malaysian Consensus Guideline on ARV Therapy 2022 requires clinicians to assess CD4 levels through the conduct of immunologic response to antiretroviral therapy, discontinue prophylaxis for opportunistic infections, monitor HIV viral load in response to treatment, and detect treatment failure early.

Priority: 1

ii. Provider-initiated testing and counselling services

The Ministry of Health has implemented Voluntary Counselling and Testing (VCT) and anonymous HIV screening services. However, the Provider-Initiated Testing and Counselling (PITC) approach is not well-established. Patients who show signs of HIV infection are often not offered HIV testing and counselling. Currently, a revised guideline for improved PITC services is under review. This guideline should recommend more efficient triage procedures, as well as pre-test and post-test counselling, to increase awareness about HIV indicator conditions among HCWs. The new Testing and Counselling Guideline on HIV should incorporate the PITC guide on HIV indicator conditions.

Priority: 1

iii. Transition to tenofovir disoproxil fumarate, lamivudine and dolutegravir (TLD) as the first-line treatment regime

Since 2018, the WHO's HIV treatment guidelines have advocated for the adoption of the tenofovir disoproxil fumarate (TDF), lamivudine, and dolutegravir (TLD) combination as the preferred first-line regimen for initiating antiretroviral therapy (ART) in adults and adolescents with HIV. TLD stands out as a transformative option due to its single-pill formulation, minimal side effects in comparison to Efavirenz, and heightened resilience against drug resistance. Nonetheless, the selling price of TLD aligns with that of DTG (Dolutegravir), which remains relatively high.

Addressing this, the government must allocate additional funds for DTG procurement while considering downgrading DTG from A* to A/KK in the MOH Drug Formulary, a measure currently under review. Collaborative efforts between the Bahagian Kawalan Penyakit, Bahagian Perkembangan Perubatan, and Bahagian Amalan dan Perkembangan Farmasi are crucial for negotiating with major pharmaceutical entities to reduce medication costs. Furthermore, strategic purchasing of larger medication volumes can leverage economies of scale, making prices more accessible.

In addition to price negotiations, the MOH Drug Formulary should reassess prescribing restrictions, allowing patients experiencing intolerable side effects to transition to alternative antiretroviral therapies. This approach ensures patient-centred care and fosters flexibility in treatment decisions. By implementing these recommendations, Malaysia can enhance access

to affordable and effective HIV treatment options, ultimately improving health outcomes for individuals living with HIV.

Priority: 1

iv. Testing gaps (in young KP)

The rising trend of HIV infections among younger demographics presents a significant hurdle in achieving comprehensive testing coverage. As transmission patterns increasingly skew towards sexual transmission, particularly within the MSM demographic, the age of individuals at risk is progressively younger. Although individuals under 18 are susceptible to infection, the World Health Organization (WHO) has previously advised testing and early treatment initiation for young people aged 15-24 upon HIV-positive diagnosis.

However, legal constraints pertaining to consent hinder the implementation of widespread testing initiatives. Currently, these legal limitations restrict testing protocols to individuals aged 18 and above. This regulatory framework poses a challenge in identifying and providing timely interventions for younger individuals who may be at risk of HIV infection.

Addressing this challenge necessitates a multi-faceted approach involving advocacy for legislative reform to enable testing and treatment access for younger age groups. Additionally, targeted outreach programs and educational campaigns tailored to younger demographics can enhance awareness and encourage proactive testing behaviours. Collaborative efforts between healthcare providers, policymakers, and community organisations are essential in navigating these legal barriers and ensuring equitable access to HIV testing and treatment services across all age groups. By fostering a supportive environment for early detection and intervention, we can effectively curb the spread of HIV and improve health outcomes for vulnerable populations.

Priority: 1

v. Management of HIV cases in prison

The current 'Garis Panduan Pengurusan HIV di Penjara (2002)' remains inadequately enforced across Malaysian prisons, leading to significant gaps in HIV management within correctional facilities. Regrettably, delays persist in administering treatment to newly diagnosed inmates,

while existing HIV-positive prisoners encounter interruptions in their treatment continuity. Furthermore, treatment disruptions often occur upon inmate release or transfer to other prison facilities, exacerbating the challenge of maintaining consistent care.

Implementing new mechanisms, such as the MyHCC platform, is imperative to address these shortcomings. MyHCC would facilitate the seamless transfer of medical records when prisoners relocate between prisons or transition to other healthcare facilities. Additionally, enhancing the TEMAN Program is crucial, focusing on post-release care and treatment continuity, supported by measurable Key Performance Indicators (KPIs).

Proposed enhancements include reinforcing guideline implementation within current prison systems and extending coverage to all correctional facilities. Introducing a buddy clinic system in every prison would bolster healthcare accessibility and ensure timely intervention. Moreover, maintaining an adequate stock of commonly prescribed ART within prison pharmacies is essential to guarantee uninterrupted drug supply for inmates undergoing treatment.

By prioritising these recommendations, Malaysia can fortify its HIV management framework in prisons, ensuring comprehensive care delivery and optimising health outcomes for incarcerated individuals living with HIV.

Priority: 1

vi. Mapping for positive HIV cases

There is an urgent need for strengthened interventions to address the issue of late HIV diagnosis, as a significant number of individuals only seek medical assistance when their CD4 count has fallen below 200. Current CBT approaches have demonstrated limitations in effectively reaching high-risk groups, resulting in low HIV detection rates. A more proactive and strategic approach is necessary to tackle this challenge.

To enhance early detection rates (identifying HIV with a CD4 count above 500), HIV counsellors should conduct comprehensive interviews and gather detailed information for every new HIV case. This detailed approach facilitates accurate contact tracing and identification of likely transmission sources and hotspots within each district. Counselling sessions should incorporate questionnaires about locations associated with potential high-risk activities. Hotspots can be mapped by leveraging this location-based data and collaborating

with local NGOs, allowing CBTs to focus on targeted testing in these areas. This strategy aims to optimise resource allocation and increase testing efficiency.

To assess the efficacy of this approach, a pilot project could be implemented in one district or state for one month. This pilot initiative would provide valuable insights into the feasibility and effectiveness of the proposed intervention. By implementing these measures, we can strive to improve early HIV detection rates, mitigate the impact of late diagnosis, and enhance overall HIV management strategies within communities.

Priority: 2

vii. Peer support services as part of DHSKP

There is a growing concern that NGOs prioritise CBT over providing essential treatment support services. To effectively address this issue, NGOs and CHWs must enhance their support mechanisms for KPs, mainly focusing on treatment adherence and peer support initiatives.

Concerted efforts are needed at healthcare facilities and online platforms to enhance treatment adherence and peer support services. The efforts include strengthening support services at methadone clinics, HIV treatment clinics, and STI client-friendly clinics (STICFC) and leveraging digital platforms such as WhatsApp, Telegram, and dating apps to extend outreach efforts. Reinforcing support structures at these key locations and utilising online platforms to engage with KPs, NGOs, and CHWs can bridge the gap between community-based treatment and treatment support services. This holistic approach ensures that KPs receive the necessary assistance to adhere to their treatment regimens and access peer support networks, ultimately improving health outcomes and reducing transmission rates within these vulnerable populations.

Priority: 2

viii. Inclusion of Dapsone as an alternative to Cotrimoxazole as an opportunistic infection (OI) treatment

There has been an emerging suggestion regarding the potential use of Dapsone, a medication commonly employed in treating leprosy and tuberculosis, as an alternative treatment for HIV.

However, despite its potential efficacy, Dapsone is not currently listed in the MOH Medicine Formulary (MOHMF) as a treatment for opportunistic infections (OI) associated with HIV.

We strongly recommend incorporating Dapsone into the MOHMF as an alternative to Cotrimoxazole (Bactrim) for treating opportunistic infections. Given its potential benefits and the existing reliance on importation, there is a critical need for the government to stimulate local production of Dapsone. This would not only facilitate a price reduction but also ensure a consistent and reliable supply of the medication. By taking proactive measures to include Dapsone in the MOHMF and promoting local manufacturing, the government can enhance access to essential HIV treatment options, optimise healthcare resources, and ultimately improve health outcomes for individuals living with HIV.

Priority: 2

ix. Performance analysis on ART initiation by facility – district – state

The problem of delayed initiation of ART among newly diagnosed HIV cases demands urgent attention. This issue may manifest differently across districts or localities, necessitating a targeted approach based on district-level data analysis.

It is crucial to systematically review district-level dashboards to identify areas with suboptimal performance in initiating ART. Conducting a thorough root cause analysis is paramount to understanding the underlying factors contributing to delays. Initiate an audit to meticulously analyse the timeframe between HIV confirmation and ART initiation, identifying and addressing any bottlenecks. This audit must delve into the reasons behind the delays, distinguishing between factors from healthcare providers and those related to laboratory processing. By undertaking these measures, healthcare authorities can pinpoint areas for improvement, implement targeted interventions, and streamline processes to ensure timely initiation of ART for all newly diagnosed HIV cases, ultimately improving health outcomes and reducing transmission rates.

Priority: 2

3.1.2 Strategy 2: Prevention Programme for PWID

The latest IBBS study (2022) reveals that PWID in Malaysia engages in daily drug injection practices, with a median of two injections per day. Despite this, the utilisation of sterile injecting equipment remains notably high, with a reported rate of 79.5% in 2022. This accessibility to sterile equipment is believed to be a significant contributing factor to the declining trend of HIV prevalence among PWID, despite persistent challenges such as relatively low levels of HIV knowledge (54.4% based on the five UNGASS indicator questions) and suboptimal rates of HIV testing among this demographic (38.8%). Encouragingly, consistent with previous IBBS findings, condom use at last sexual intercourse remains stable, with only 25.7% of PWID reporting its use.

The Harm Reduction Opiate Substitution Therapy (OST) program, operational since 2005, has grown substantially, expanding from ten sites to 889 by 2022, involving multiple agencies. Government-run facilities have registered a significant number of patients, with 44,538 as of June 2017, while general practice settings accommodate 50,616 patients as of December 2016. Notably, the IBBS 2017 data indicates that 38.4% of PWID have enrolled in Methadone Therapy programs, with a retention rate of 60.9%.

Furthermore, the Needle Syringe Exchange Programme (NSEP) demonstrates extensive intervention coverage, reaching 88% of PWID and totalling 101,959 registered clients in 2017. Both NGOs (operating 349 NSEP sites) and government health clinics (152 sites) contribute to this program. The rate of returned needles and syringes has steadily risen from 61.5% in 2013 to 70.4% in 2017, reflecting improved program efficacy. Additionally, up to 20% of NSEP clients are referred to Methadone Therapy programs, enhancing overall harm reduction efforts.

Regarding ARV, the IBBS 2017 report indicates that 6.0% of PWID participants had received ARV treatment, with a notable retention rate of 89.2%. Despite this, a small proportion defaulted on treatment, with a default rate of 11% among those enrolled in Methadone Therapy and 9% among those not in the program.

These findings underscore the importance of continued investment and expansion of harm reduction programs, coupled with efforts to enhance HIV knowledge and testing uptake among PWID, to reduce HIV transmission further and improve health outcomes in this population.

Recommendations

i. Defining and expanding the scope of drug use intervention

Extending strategies aimed at assisting PWID to non-injecting drug users is crucial for comprehensive harm reduction efforts. Recognise the widespread prevalence of drug use, both injecting and non-injecting, among various key populations. Incorporate these diverse sub-groups into the planning and implementation of intervention strategies to address their specific needs effectively.

Enhancing access to OST, beyond just methadone, is imperative. To reach users and patients effectively, OST clinics must adhere to best practices through targeted channels. Engaging GPs and community pharmacies in promoting low-threshold methadone facilities to PWIDs/PWUDs in the community is vital. Strengthening advocacy efforts is necessary to educate the public about the benefits of methadone and counter-resistance or negativity towards the program.

Conducting studies to assess the effectiveness of buprenorphine/naloxone (Suboxone) in reducing cravings for amphetamine-type stimulants (ATS) via sublingual film administration is proposed. Facilitating referrals of all PWID/PWUDs to the One Stop Centre for Addiction (OSCAs) is crucial, as leveraging human resources from the people who use drugs (PWUD) community can enhance communication and influence among peers. Presently, only specific clinics offer OSCAs, with 78 centres nationwide. Addressing challenges such as the need for a multidisciplinary team to deliver services and promote OSCA services to the general public is imperative.

There has been a significant increase in the number of PWUDs. The National Anti-Drug Agency (NADA) reported 28,000 newly registered PWUDs, with only 6,000 within Rehabilitation Centres. The data underscores the growing population of PWID and PWUD individuals residing outside closed institutional settings. Hence, it is essential to include PWID and PWUD individuals identified as Orang Kena Pengawasan (OKP) (under surveillance) and Orang Dalam Parol (ODP) (on parole) in relevant intervention strategies. This inclusive approach ensures that support and resources reach all individuals affected by drug use, promoting their well-being and reducing harm in the community.

Priority: 1

ii. Linkages and referral systems for continuity of care

PWUD/PWIDs often hesitate to disclose their methadone treatment status during remand in institutions such as the National Anti-Drug Agency (AADK) lockups or prisons, fearing potential repercussions from AADK and law enforcement authorities. Despite the existence of a Standard Operating Procedure (SOP) between the police and the Ministry of Health, many Investigating Officers lack sufficient awareness about the methadone program. Consequently, prison officials may overlook providing methadone to these prisoners. To address this, the Ministry of Health should explore involving GPs in the national methadone program, potentially through the ProtectHealth initiative. Expanding the methadone program to include community pharmacies holds promise, albeit requiring legislative revisions to facilitate and promote low-threshold services.

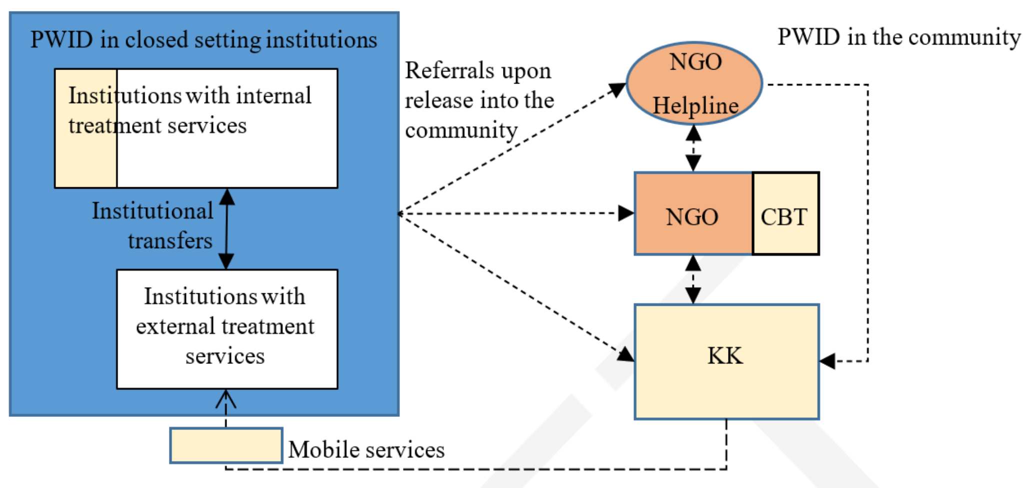
Loss to follow-up during transitions between institutions and upon release from closed settings is a prevalent issue among PWID. Therefore, establishing collaboration and linkages between local health clinics and various government agencies, including NADA, the police (PDRM) including its parole unit, and the Prison Department, is vital to ensure continuity of care in case management. Incorporating harm reduction into police and prison training curricula represents a longer-term approach to mitigating HIV transmission among PWID/PWUD. Moreover, enhancing staffing levels among pharmacists, Medical Officers (MO), and Medical Assistants (MA) in prisons could improve management and service delivery. To overcome these challenges, the following processes can be implemented:

- **Review Transfer and Release Processes for PWID on ARV:** Streamline and enhance protocols to ensure continuity of antiretroviral treatment (ARV) during and after transfer or release.
- **Implement Pre-Release Training Programs:** Equip PWID transitioning back into the community with the knowledge and resources needed to continue their treatment effectively, fostering a smoother reintegration process.
- **Appoint Resource Persons at the District Level:** Assign outreach workers to establish robust connections with institutions like NADA, facilitating the alignment of shared objectives and strengthening community empowerment initiatives.

Figure 10 illustrates a proposed inter-institutional linkage and network for PWID case management and continuity of care. This system, primarily focused on treatment, could be expanded to cover the overall welfare of PWID comprehensively.

Priority: 1

Figure 10: Proposed inter-institutional linkage and referral network system for the case management of PWID on treatment



iii. Renewing Engagement with Partner Institutions

Over the years, Malaysia has demonstrated notable progress in its approach to intervening in programs targeting PWID, particularly those within closed settings like prisons or drug rehabilitation centres. Despite encountering diverse challenges and limitations inherent to addressing a multi-stakeholder target group, there is a pressing need for renewed engagement to ensure steadfast commitment to implementing effective strategies.

One approach involves facilitating knowledge-sharing sessions among key stakeholders, including NGOs working with PWID, the NADA, and the Prison Department. These sessions serve as forums to address implementation and enforcement challenges while fostering advocacy and raising awareness. The engagement would be comprehensive, addressing issues ranging from stigma and discrimination to establishing linkages to care and enhancing the provision of methadone services. Furthermore, to address the broader social determinants of health for PLHIV, it is imperative to strengthen engagement with non-health services, such as the Ministry of Women and Welfare Departments. This entails identifying avenues for their

support in existing efforts, establishing robust service pathways, and promoting services to the broader society. A more holistic approach can be achieved by fostering collaboration with diverse service providers, facilitating improved health outcomes and well-being for PLHIV.

Priority: 1

iv. Scaling-up Uptake of OST and Treatment Services

There has been a setback in the expansion of OST services, primarily due to the reduced service provision by GPs and the closure of Cure & Care centres. Consequently, health clinics (KK) face challenges in reaching clients who may not access government healthcare services. To mitigate this issue, KK must review its operational hours to address accessibility gaps effectively. Another viable recommendation involves empowering selected NGOs to serve as OST service provision centres. However, for this initiative to materialise, several conditions must be fulfilled. These include ensuring the presence of qualified medical personnel, including doctors and pharmacists, on-site, potentially including community pharmacists. Additionally, the site would need to be officially gazetted to permit medical practice, establish a robust referral system for clients requiring follow-up and monitoring at KKs, and revisit the issue of operational permits instead of compliance with the Private Healthcare Facilities and Services Act 1998 (Act 586) & Regulations 2006 (PHFA). By implementing these measures, Malaysia can overcome the challenges hindering the scaling up of OST services and ensure wider accessibility for individuals in need, ultimately enhancing harm reduction efforts and improving health outcomes among affected populations.

Priority: 1

v. Research

To gather crucial insights into drug use and health outcomes among PWUD or PWID, health ministries or research institutions can embark on long-term research studies within communities. These studies can unveil evolving patterns in drug use, access to health and non-health services, and health outcomes over time, encompassing adherence and viral load suppression. Collaboration with research universities is paramount to ensure the accuracy and success of these endeavours. Moreover, health ministries can play a pivotal role in coordinating and facilitating the establishment of additional sentinel sites for data collection. These sites

serve as invaluable resources for monitoring emerging trends in drug use and access to services, contributing to a comprehensive understanding of the landscape. By leveraging such data, policymakers can make informed decisions, shaping policies that effectively address the needs of PWUD and PWID, thereby enhancing health outcomes.

Furthermore, conducting periodic cost-effectiveness studies is imperative to ensure the sustainable funding of harm reduction programs. These studies offer insights into the efficiency of resource allocation, enabling organisations and governments to make informed decisions regarding funding allocation. By prioritising cost-effectiveness, stakeholders can optimise resource utilisation, ensuring the continuity and efficacy of harm reduction initiatives and, ultimately, providing essential support to those in need.

Priority: 2

3.1.3 Strategy 2: Sexual Transmission Mitigation

A. Men Who have Sex with Men (MSM)

The HIV prevalence rate among MSM in Malaysia, once the lowest among high-risk key populations, has undergone a significant surge over the past eight years. From a reported rate of 3.9% in 2009, it skyrocketed nearly seven-fold to 21.6% in 2017. Notably, recent IBBS data from 2017 highlighted alarming figures, with Kuala Lumpur and Johor recording the highest HIV prevalence rates among MSM at 43.3% and 31.1%, respectively. However, it is essential to acknowledge that the survey was confined to selected cities, potentially limiting its representativeness. In 2017, only 65.4% of MSM reported condom use during their last anal sex encounter with a male partner. Alarmingly, just 30.8% received condoms and Behaviour Change Communication (BCC) through any HIV prevention program, while less than half underwent HIV testing within the past year.

Multiple approaches are employed to prevent HIV transmission among MSM, including community-based testing, online interventions (e.g., Grindr, Twitter), physical approaches offline (e.g., saunas, cruising areas, clubs), outreach programs, health camps, and peer support initiatives. Recent IBBS findings from 2022 revealed that 75% of MSM had a history of being contacted by an NGO. Issues such as Chemsex, STIs, Pre-Exposure Prophylaxis (PrEP), and condom use are recognised as pivotal concerns within the MSM community. According to

survey data, 7.8% of respondents admitted to using drugs before sex, with a significant majority (69.9%) opting for ATS. However, STI clinics have low utilisation, with only 18.4% of patients reporting a visit within the past three months. Moreover, there appears to be limited willingness, availability, and knowledge regarding PrEP as a preventive measure, contrasting with a relatively higher reported rate of 75% for condom use during the last sexual encounter.

Recommendations

i. Harm Reduction Interventions for Chemsex or Chemfun.

Chemsex, also known as chemfun, denotes the practice of using certain drugs, often in a sexual context, to enhance or prolong sexual experiences. However, this practice carries significant health risks for individuals involved. These risks encompass addiction, mental health issues such as depression and anxiety, and the potential for overdose. Moreover, the combination of drugs and sexual activity can lead to risky behaviours like unprotected sex and engaging in sexual activities with multiple partners, thereby heightening the risk of contracting STIs, including HIV/AIDS.

Efforts to address chemsex typically revolve around harm reduction strategies aimed at minimising associated risks. These strategies include promoting safer sex practices, facilitating access to substance abuse treatment and mental health services, and providing education and support to individuals engaging in chemsex. Individuals involved in chemsex must recognise the potential dangers and seek assistance if necessary.

A proposed web tool aims to develop a harm reduction intervention for chemsex. This tool would allow users to anonymously assess the negative interactions of different drugs and alcohol intake and receive warnings about harmful levels. Additionally, CSOs and NGOs can play a pivotal role in distributing harm reduction packs to the community. These packs may include needles and syringes, condoms, lubricants, HIV self-test kits, electrolyte tablets for salt replacement, and a checklist outlining precautions to take before, during, and after chemsex. Furthermore, a QR code in the pack would direct users to a website listing resource centre and OSCA clinic locations. Similar strategies could involve collaboration with private parties or chemsex party organisers to distribute condoms, party packs, test kits, and checklists on safety measures. Flyers or cards containing information on chemsex, web-based resources, and

contact details for Community Health Workers (CHWs) could also be provided to raise awareness and offer support to individuals involved in chemsex.

Priority: 1

ii. Social Media Campaign

Reviewing social media campaigns and establishing realistic and attainable targets is paramount for their effectiveness. Technical proficiency is essential for crafting strategic campaigns, particularly concerning social media advertising and communication reach. However, it is observed that the existing web-based resource centre hosted on the Malaysian AIDS Council (MAC) webpage lacks user-friendliness and requires updating, notably in the list of clinics and NGOs provided. It is advised that a dedicated web-based resource centre be developed to address these shortcomings. This new platform should offer comprehensive information and convenient access to various resources. This includes links and details pertaining to PrEP, NGOs, Chemsex awareness, TEST NOW initiatives, and 'Klinik Mesra Remaja'. By creating a centralised hub with up-to-date information and user-friendly navigation, individuals seeking resources and support will have easier access to vital services and information, thereby enhancing the effectiveness of outreach efforts.

Priority: 1

B. Women at Risk (WAR)

The recent IBBS 2017 study shed light on the HIV prevalence among FSWs in Malaysia, revealing a notably lower prevalence rate of 6.3% compared to other high-risk key populations. Although there is an overall decreasing trend in HIV prevalence, concerning trends have emerged in specific regions like Kuala Lumpur and Penang. In Kuala Lumpur, the HIV prevalence among FSWs soared to 16.9%, more than double that of Penang's 7.4%.

While FSWs exhibit commendable condom use during commercial sex encounters, with only one out of five reporting unprotected sex with their most recent client, there is a worrying pattern of low condom use with regular sexual partners. Approximately one out of three FSWs admitted to unprotected sex with their sexual partners in the previous month, and only half used

condoms during their last sexual encounter with partners. Additionally, there is a concerning uptick in the use of substances like syabu and ecstasy among this demographic.

Overall, FSWs face challenges with low HIV prevention coverage, testing rates, and knowledge. According to the Commission on AIDS in Asia (2008), achieving at least 80% coverage of high-risk populations by HIV prevention programs is crucial for significant behaviour change and reducing new HIV infections. Therefore, urgent efforts are needed to enhance prevention efforts, increase access to testing, and improve education within the FSW community to combat HIV transmission effectively.

Recommendations

i. Reach Out for WAR.

Enhancing outreach efforts to reach FSWs and WARs demands innovative approaches and close collaboration with local authorities, particularly the licensing unit of local councils. This partnership can yield a comprehensive list of establishments like spas and reflexology centres, facilitating HCWs' collaboration with the district or state health teams to engage with FSWs/WARs and deliver vital HIV interventions.

Leveraging the existing government-to-government (G2G) network between healthcare teams and other governmental bodies, HCWs can engage with premises owners, known as taukes, to emphasise the importance of HIV/STI prevention services. This approach aims to secure their cooperation and support for HIV prevention initiatives. It presents a mutually beneficial opportunity by offering free condom distribution, doctor referrals, and treatment for local FSWs/WARs while ensuring service reliability through a quality assurance mechanism akin to SIRIM MS ISO standards.

Another innovative approach to HIV/STI prevention services involves treating them as products with unique marketing strategies and value-added services. For instance, offering HPV screening for early detection of cervical cancer can add value to these services. Various avenues for HIV/STI screening, including self-tests through CBT and VCT, could be made available. Clients may book appointments via the MySejahtera app or with the assistance of a liaison officer, who can facilitate bookings directly with CHWs. Additionally, walk-in appointments should be accommodated.

To expand outreach efforts, dissemination of relevant information on HIV and STI can be, including pornography sites, to reach FSWs/WARs and their clients effectively. Collaborations with relevant agencies such as the Institute of Population and Family Development (LPPKN) and the Ministry of Women, Family and Community Development (KPWKM) can enhance service offerings by providing Sexual and Reproductive Health (SRH) services and other women-related assistance. These collaborative efforts aim to maximise the reach and impact of HIV/STI prevention services among FSWs/WARs and contribute to broader public health goals.

Priority: 1

ii. Mapping Strategies

The project manager (PM) should conduct on-site visits to areas likely to encounter FSWs and WARs. It's imperative to meticulously identify and map these locations, utilising online outreach to gauge market response. Crafting marketing strategies that render services more appealing and distinctive is crucial, supplemented by follow-up visits and physical outreach efforts.

Consistent and periodic execution of this process is vital to ensure that FSWs and WARs are well-informed about the availability of HIV/STI services at key hotspots, such as the coffee shop in Area X. Leveraging social media platforms for promotion can be highly effective. For instance, attention-grabbing posts like 'FREE Condoms - ONLY available for 15 minutes' can generate interest and engagement among the target audience. By adopting a multi-faceted approach encompassing both physical and digital outreach strategies, the project can maximise its reach and impact among FSWs and WARs, ultimately advancing the goals of HIV/STI prevention initiatives.

Priority: 1

iii. Social Media Campaigns

Despite the availability of resources, there remains a gap in effectively preventing HIV transmission through sex work. Leveraging social media platforms presents a promising opportunity to address this gap by enhancing outreach efforts and promoting prevention

services. This report explores strategies to optimise social media campaigns in promoting HIV prevention programs for FSWs and WARs, focusing on collaboration between CHWs, HCWs, and CSOs.

Key Strategies:

a) Utilizing STICFC/KK Model 2.0: Social media platforms can extend the reach of the STICFC/KK Model 2.0 and promote its services to FSWs and WARs. CHWs can actively promote service through social media channels, disseminating information about available resources, testing facilities, and support services.
b) Capacity Building: Conduct training sessions for relevant healthcare workers (HCWs) and civil society organisations (CSOs) to develop and maintain Information, Education, and Communication (IEC) materials tailored to the specific needs of female sex workers (FSWs) and women at risk (WARs). Focus the training on creating culturally sensitive content that addresses stigma and removes barriers to accessing HIV prevention services.

Priority: 2

C. Transgender Women (TGW)

The TGW community in Malaysia faces significant challenges in HIV prevention and support, as evidenced by the relatively high HIV prevalence rates and barriers to accessing services. This report aims to outline key findings from recent IBBS studies and propose strategies to improve HIV prevention and support services for transgender individuals.

The HIV prevalence among transgender individuals in Malaysia is the second highest among high-risk key populations, reported at 10.7% based on IBBS 2017. The prevalence varies across different regions, with rates as high as 23.7% in Kuala Lumpur and Negeri Sembilan and as low as 0.8% in Sabah. Condom use among transgender individuals with their clients remains relatively high, consistently reported at over 80% in the past two IBBS studies. However, coverage levels for effective HIV prevention services among transgender individuals remain low, generally less than 80%. Despite the availability of testing services, there is a low uptake of HIV testing among transgender individuals, with only 43% reporting having been tested and knowing their results in the past 12 months. One out of five transgender individuals had never

tested for HIV. The use of drugs and alcohol before sex may lower the ability to negotiate condom use, contributing to HIV risk among transgender individuals. Additionally, issues such as depression, economic pressures, and low self-esteem amplify their vulnerability to HIV.

Recommendations

i. Enhancing Outreach and Mapping Efforts for Transgender Communities

The COVID-19 pandemic has exacerbated the challenge of reaching and supporting transgender individuals, many of whom have experienced increased mobility. This mobility presents obstacles in locating and engaging with them for essential services, including HIV/STI prevention and support. To address this issue, it is imperative to conduct comprehensive mapping exercises targeting the transgender community, encompassing full-time and part-time individuals. Such mapping exercises are essential not only for identifying transgender individuals but also for obtaining a more accurate estimation of the community's population size.

Building trust within transgender communities is paramount to ensure their active participation in interventions and services. Establishing meaningful relationships through community engagement initiatives, culturally sensitive approaches, and outreach efforts can facilitate trust and collaboration. By fostering trust, interventions can be planned and executed more effectively for the benefit of the community. Cross-border communication presents another challenge, particularly for transgender individuals who may migrate or be deported. Developing SOPs for communication between countries can streamline information exchange and ensure continuity of care for migrants who are positive for HIV/STIs upon deportation. Such SOPs are vital to facilitate follow-up and treatment in their country of origin.

Priority: 1

ii. Stigma and Discrimination Towards TGW

The most significant barriers to accessing testing, treatment and care among the TGW community were stigma and discrimination, including by healthcare providers. For the sub-group within the TGW community who are also injecting drug users, access to appropriate prevention programmes should be made available, including links to the PWID community-based organisations. There is also a need to address long-term issues such as healthcare

providers' perception of the TGW community and the fact that, often, government-run programmes are not favoured by the community.

Priority: 1

3.1.4 Strategy 2: Children, Adolescents, and Young People (Young Key Population – YKP)

Adolescence is the developmental stage between childhood and adulthood, typically ages 10 to 19. Some sources define youth as extending up to the age of 24, encompassing young people aged 15 to 24, and including children under 18 as part of this developmental phase. Children under 18 are also considered part of this phase of life.

To effectively engage adolescents and young people, campaigns deliver health lectures, distribute flyers, and provide handouts tailored to their needs. While these methods have been helpful in the past, they are no longer enough in today's environment. Adolescents and young people are no longer interested in these traditional campaigns, which are not interactive enough to grab their attention.

Recommendations

i. Enhancing the delivery of curriculum and co-curriculum related to HIV education and awareness in school

To implement several key strategies to enhance the delivery of HIV education and awareness in schools:

1. Teacher Training: Provide comprehensive training for teachers on HIV/AIDS prevention and SRH. This training should cover the essential components of HIV/AIDS prevention, known as the 'ABCDE' approach, along with effective HIV counselling skills.
2. Establishment of a Task Force: Form a dedicated Task Force, such as the National Youth Technical Meeting, focusing on HIV/STI, drug abuse, and reproductive health. This Task Force can devise appropriate interventions tailored to the needs of schools and students, ensuring comprehensive coverage of relevant topics.

3. Promotion of School Activities: Encourage schools to conduct various activities and programs related to health education during school assemblies. This includes reading and discussing health education materials to raise students' awareness about HIV/STI prevention and SRH.
4. Expansion of PROSTAR 2.0 Program: Strengthen and expand existing programs like PROSTAR 2.0, designed to promote healthy behaviours and prevent risky practices among students. This program can serve as an effective platform for delivering targeted HIV education and awareness initiatives within schools.
5. Development of Digital Health Education Materials: Recognize the importance of digital platforms in disseminating information to children and young people. Create engaging and accessible digital health education materials on HIV/AIDS prevention and sexual and reproductive health (SRH). To maximise their reach and impact, distribute these materials widely through diverse channels, such as social media platforms, health facilities, schools, universities, and colleges.

Priority: 1

ii. Access to HIV and STI testing for the young key population.

Propose lowering the legal age for HIV testing for young children from 18 to a younger age to improve early detection and intervention. The Ministry of Health is also encouraged to explore the feasibility of creating an online platform for STI self-care targeted at young people. This platform could include services such as online condom distribution, STI awareness campaigns, and self-sampling options for HIV and HCV testing. The government, NGOs, or the private sector could develop and manage the platform.

Introduce a "Youth at Risk" program to support underprivileged youth, school dropouts, indigenous communities, and individuals with disabilities. This program would deliver HIV and STI prevention guidelines, with a specific focus on pelvic inflammatory disease (PID), to address their unique needs effectively.

Priority: 1

iii. Interactive and multimedia campaign to reach out to adolescents and young people

To improve early detection and intervention, we propose lowering the legal age for HIV testing for young children from 18 to a younger age. The Ministry of Health should also be encouraged to explore the feasibility of creating an online platform for STI self-care targeted at young people. This platform could include services such as online condom distribution, STI awareness campaigns, and self-sampling options for HIV and HCV testing. The government, NGOs, or the private sector could develop and manage the platform.

Introduce a "Youth at Risk" program to support underprivileged youth, school dropouts, indigenous communities, and individuals with disabilities. This program would deliver HIV and STI prevention guidelines, with a specific focus on pelvic inflammatory disease (PID), to address their unique needs effectively.

Priority: 1

iv. Creating a safe and supportive environment for young people.

Implement targeted interventions to ensure a safe and supportive environment for young people. Key strategies include:

1. **Mandatory HIV/STI and Sexual Education Programs:** To enhance awareness and prevention, make these programs compulsory for orientation sessions in higher education institutions.
2. **HIV Screening Policies:** Establish policies for HIV screening of new intakes in specific institutions and workforces, such as the armed forces (ATM), police, navy, and juvenile detention centres.
3. **Targeted Screening in Institutional Settings:** Conduct HIV and STI screenings for specific groups of adolescents in institutions under the Department of Social Welfare (JKM), including Sekolah Tunas Bakti, Henry Gurney Schools, prisons, and institutions overseen by agencies like KPT, KPM, and KBS.
4. **Community-Based Screening:** Expand screening activities to adolescents in community settings and non-established platforms, focusing on reaching underserved groups.

5. **Training for Healthcare Providers:** Equip medical officers in health clinics with specialised training, such as HEADSSS, to manage HIV and STI cases effectively.
6. **Support for Adolescents Living with HIV and Young PLHIV:** Provide comprehensive treatment support, including initiatives to improve treatment adherence through support groups. Enhance the skills of paramedic adolescent counsellors in adherence counselling through advanced training, such as Post-basic HLP.
7. **Engagement Through NGOs:** Encourage NGOs to develop innovative strategies, like employing community health workers (Pekerja Kesihatan Komuniti), to engage ALHIV and young PLHIV, linking them to care and improving outcomes.

These measures aim to strengthen prevention, improve early detection, and enhance care for young people, particularly those at risk or living with HIV/STIs.

Priority: 2

3.1.5 Strategy 2: Elimination of Mother-To-Child Transmission (EMTCT) of HIV and Syphilis

Malaysia was among the early adopters of the Prevention of Mother-to-Child Transmission (PMTCT) Program for HIV and syphilis in maternal and child health services. In 2018, the EMTCT of Malaysia's HIV and syphilis program was validated by WHO as the country achieved the set targets for 2016 and 2017. Malaysia has maintained the elimination indicators for the subsequent years—2018, 2019, and 2020.

To strengthen the implementation of the National PMTCT program for HIV and syphilis, the Ministry of Health updated the guidelines in June 2021. The Prevention of Mother-to-Child Transmission (PMTCT) of HIV and Syphilis Guidelines 2021 serves as the blueprint for all healthcare personnel involved in providing maternal and child health in the government and private sectors, including training hospitals to ensure standardisation of service delivery and maintenance of EMTCT.

Recommendations

i. Improving turnaround time for HIV RNA PCR testing

Centralized HIV RNA PCR testing for HIV-exposed infants under 18 months often delays results by 3 to 4 weeks before reaching the requested facilities. While centralization aims to streamline result tracing—accounting for the complex testing and management process across various states, regions, or facilities—these delays can result in late diagnoses and delayed treatment for affected infants. Transition testing services should be implemented toward regional decentralization to address this issue. This approach, supported by the MyHIV Care Cascade (MyHCC) Registry, can ensure timely results while maintaining strict confidentiality.

Priority: 1

ii. Review of charges for PMTCT services for immigrants, refugees and asylum seekers

There should be a comprehensive review of charges imposed for diagnosis and treatment, which should ideally include immigrants, refugees, and asylum seekers, considering that PMTCT expands beyond pregnancy. Laboratory testing services currently exclude immigrants, refugees, and asylum seekers, leaving these vulnerable groups without access to essential healthcare support. Expanding these services to include them is crucial for promoting equitable healthcare and addressing public health challenges effectively. Current PMTCT services significantly reduce death among children with HIV and syphilis. However, there is an urgent need to address the PMTCT among immigrants, refugees, and asylum seekers for the program to be successful.

Priority: 1

iii. Sustaining supply of syrup zidovudine

There is low market demand for zidovudine syrup in Malaysia due to the decreasing number of newly diagnosed HIV infants, and only the original zidovudine syrup is available in Malaysia. There is a need to address the concerns regarding its future availability for HIV prophylaxis use in infants by ensuring there is sufficient supply available for those requiring it. Procurement strategies should be adjusted based on projected demand to prevent shortages.

Priority: 2

iv. Exploring alternative sampling methods, especially in remote areas

Laboratory facilities in remote areas and the credentials required to perform testing in these areas should be improved. Similarly, efforts should focus on improving mobile services and rapid testing for syphilis diagnosis in these areas. A sufficient proportion of attendees undergo HIV testing. However, the comparatively high payments imposed on non-citizens for testing are a hindrance. Existing practices allow for declared partners to be adequately involved in PMTCT services. Dried blood spot (DBS) testing can alleviate phlebotomy challenges and logistical issues, especially in remote areas, warranting consideration as an alternative to traditional sampling methods.

Priority: 2

3.1.6 Strategy 3: Stigma and Discrimination (S&D)

The HIV Sector conducted a pilot study to reduce S&D. However, the results post interventions showed that the program requires improvements in the intervention period, sample size, evaluation questions, participant incentives, community-based approaches, and monitoring. Therefore, stakeholders must quickly implement the S&D programs planned for 2016. A dedicated team should evaluate S&D in all health facilities, ensuring sufficient evidence supports the interventions. Additionally, authorities should allocate more funds and provide more training programs for staff to address S&D effectively.

Recommendations

i. Expansion of the S&D pilot study

Current programs effectively reduce S&D but operate in only a limited number of government facilities. To address this, stakeholders should expand the program to other health facilities. Authorities should also leverage digital technology, such as app-based platforms like MySejahtera, to identify and combat S&D, particularly self-stigma. Furthermore, the national S&D program can be enhanced by incorporating the HOPE Module and using open-ended questions for feedback, rather than directed questions, to address S&D. Stakeholders must allocate more funds specifically for S&D advocacy programs to ensure comprehensive support.

Priority: 1

ii. To explore possibilities of making the S&D as one of the National Indicator Approaches (NIA)

The Ministry of Health must develop a National Policy on S&D and designate S&D as one of the National Indicator Approaches (NIA), aiming to train 50% of PLHIV and HCWs in S&D. The pilot study found that the intervention reduced S&D among HCW indicators by 20-40%. However, 6% of PLHIV reported experiencing discrimination, which remained unchanged despite the intervention. These findings can serve as a baseline for future national S&D strategies in Malaysia.

Priority: 1

3.1.7 Strategy 4: Quality Strategic Information and its Use Through M&E and Research

The Malaysia Cabinet directed the establishment of the HIV/AIDS Section to enhance the prevention and control of HIV and STIs in Malaysia. The Ministry of Health (MoH) significantly upgraded its screening data system to improve data collection and management. Previously, the State Health Departments' (JKN) Monitoring and Evaluation (M&E) teams manually compiled data using Microsoft Excel, which was later aggregated and uploaded to MyHIV/STIC. This system, operating on Google Workspace within the Government cloud platform, now receives monthly data uploads from the JKN M&E teams. The MoH plans to transition to the Electronic National Centre for Disease Control (eNCDC), a flagship project under the *Pelan Strategic Pendigitalan 2021-2025*, set to launch in 2025.

The MoH has also modernized its treatment data system. Previously, granular data on PMTCT, HIV, and syphilis from JKN were stored in Microsoft Excel and integrated into the National AIDS Registry (NAR), which served as the national HIV/AIDS patient database. In 2020, the MoH introduced the MyHIV Care Cascade (MyHCC) for real-time patient data monitoring, enabling instant updates from health clinics to the MyHCC portal dashboard. Initially developed for monitoring HIV and Hepatitis C, the system expanded in 2023 to include PMTCT (Prevention of Mother-to-Child Transmission) for HIV and syphilis, as well as PrEP (Pre-Exposure Prophylaxis) patient monitoring. The MoH plans to fully integrate all patient monitoring data into the eNCDC in the near future.

The process for collecting NGO screening data has also undergone significant modernisation. Previously, NGOs used SyrEx, a manual system requiring physical referral slips and books, with data entry handled by project managers. Today, NGOs use the Malaysia Online Daily Recording System (MyODRS), powered by Google Workspace. *Pekerja Komuniti Kesihatan* (PKK) staff now enter, view, edit, download, and analyse data directly on dashboards, facilitating performance monitoring across NGOs and PKKs. Plans include integrating the MySejahtera portal/app with MyHCC to enhance data coordination and management further.

To address stigma and discrimination (S&D), the Ministry of Health must develop a National Policy on S&D and designate it as one of the National Indicator Approaches (NIA), aiming to train 50% of PLHIV and healthcare workers (HCWs) in S&D. Findings from the pilot study revealed a 20-40% reduction in S&D among HCWs following the intervention. However, 6% of PLHIV reported experiencing discrimination, a figure unchanged by the intervention. This data serves as a baseline for shaping future national S&D strategies in Malaysia.

3.2 Strategic Priorities for Ending STIs by 2030: A Comprehensive Action Plan

3.2.1 Advocacy, Communication and Social Mobilisation

This strategy focuses on raising public awareness, reducing stigma, and fostering an open dialogue about sexual health and STIs in Malaysia. By leveraging advocacy, education, and community engagement, the goal is to promote early treatment, encourage prevention, and create an enabling environment for individuals to seek care without fear of discrimination or judgment.

***Recommendations*:**

i. Increase awareness of STIs and their symptoms and encourage seeking early treatment

Increasing awareness of STIs and encouraging early treatment is crucial in reducing the spread of infections, especially among high-risk populations. To achieve this, it is essential to educate the public about the symptoms of STIs and the consequences of untreated infections. National and regional campaigns should be developed to provide clear, factual information, and these messages should be disseminated through various media platforms, including television, radio, social media, and print, to ensure they reach diverse audiences such as youth, at-risk groups, and rural communities. Collaborating with influencers, community leaders, and celebrities can further amplify these messages and promote discussions about sexual health. Additionally, specialised outreach programs targeting key populations, such as sex workers, MSM, and young people, will help address gaps in access to information and healthcare, encouraging early diagnosis and treatment.

Priority: 1

ii. Health education activities in healthcare, community, and other settings to normalise the dialogue about sexual health.

To foster an environment where discussing sexual health, including STIs, becomes routine and accepted, it is essential to normalise these conversations across various aspects of life. This can be achieved by organising workshops, seminars, and discussions in healthcare settings, schools, workplaces, and community centres to promote sexual health education. Training healthcare providers to engage in open, non-judgmental discussions with patients about sexual health is also crucial, as it helps to reduce stigma and encourages individuals to seek care. The Ministry of Health should create peer education programs to help community members, especially youth and vulnerable groups, learn from and support each other. These programs can build trust, share knowledge, and promote health awareness, reducing stigma and strengthening communities. Additionally, using interactive methods like role-playing, storytelling, and drama can make conversations about STIs more relatable and impactful, helping to break down barriers and increase awareness.

Priority: 1

iii. Information and age-appropriate education campaigns

This recommendation emphasises the importance of providing accurate, tailored, and age-appropriate education on sexual health and STI prevention for different age groups. The strategy involves developing educational materials designed for adolescents, young adults, and older populations, using language and formats that resonate with each group to ensure the information is engaging and relatable. Incorporating STI education into school curriculums at appropriate age levels will help build knowledge early and promote healthy sexual behaviours. Creating digital platforms, such as websites, apps, and social media channels, will also offer accessible, age-relevant STI information and resources to a broad audience. The messaging should be inclusive, considering gender, sexual orientation, and cultural diversity, to ensure the campaign reaches all communities effectively and comprehensively.

Priority: 1

iv. Address stigma and discrimination

This recommendation focuses on reducing the stigma and discrimination surrounding STIs to encourage individuals to seek treatment without fear of judgment. It aims to dismantle myths and misconceptions about STIs through public campaigns that emphasise the fact that anyone can be affected and that effective treatment is available. Collaboration with human rights organisations and civil society groups is critical to addressing discriminatory attitudes in healthcare settings and the broader community. The recommendation promotes inclusivity and empathy, reinforcing that seeking STI care is vital to maintaining overall health. Additionally, support systems such as anonymous hotlines and counselling services will be developed to help individuals overcome fears related to STI diagnosis and treatment, making healthcare more accessible and stigma-free.

Priority: 1

v. Introduce various methods for self-care strategies, self-collection of specimens, teleconferencing, and online appointments to reduce barriers to accessing STI services

This recommendation emphasises empowering individuals to take control of their sexual health by offering innovative and accessible options for diagnosis and treatment. Key actions include promoting self-care practices like self-collection specimens for STI testing, which allows individuals to conduct tests in private settings, reducing the need for clinic visits and enhancing privacy. Developing and distributing self-testing kits, especially in areas with limited healthcare access or stigma, will enable individuals to manage their health discreetly. Telemedicine services will be enhanced, providing the convenience of consulting healthcare providers remotely via teleconferencing or online platforms. Streamlined online appointment scheduling will improve access to STI care by reducing waiting times and making it easier for individuals to seek treatment when needed. Additionally, digital health tools, such as symptom checkers and STI risk assessment tools, will be integrated to help individuals manage their sexual health proactively and independently.

Priority: 2

3.2.2 Quality and Coverage of Prevention Programmes

This strategy focuses on enhancing the reach and effectiveness of STI screening programs among key, vulnerable, and general populations. It also aims to introduce accurate point-of-care tests (POCT) and newer, advanced screening technologies. By improving screening efforts, Malaysia can ensure early detection, timely treatment, and a reduction in the transmission of STIs.

***Recommendations*:**

i. Strengthening screening activities for STIs among key populations

This recommendation prioritises expanding and increasing the frequency of STI screenings for key populations at higher risk, including sex workers, MSM, PWID, and transgender individuals. Health authorities will focus on making regular screenings accessible in areas where these populations are concentrated. Mobile health clinics and community-based screening events will provide confidential testing at convenient locations such as drop-in centres and shelters, ensuring more straightforward access to care.

To support these efforts, district or state health departments will collaborate with NGOs and community-based organisations to encourage testing and integrate STI screening with other health services, such as HIV testing and harm reduction programs. Peer educators from within these populations will receive training to promote the importance of STI screening, addressing barriers like stigma, discrimination, and limited healthcare access. This approach aims to create a supportive environment that encourages routine testing and improves health outcomes.

Priority: 1

ii. Strengthening screening activities for STIs among vulnerable populations, especially antenatal mothers, sexual partners, people on PrEP, Orang Asli, Bumiputra Sabah and Sarawak

This recommendation focuses on ensuring that vulnerable populations have regular and accessible access to STI screening, with a particular emphasis on preventing mother-to-child transmission and protecting high-risk individuals. Strengthening syphilis screening for antenatal mothers is a priority to prevent congenital infections, and this screening must be

integrated into routine prenatal care in both public and private healthcare settings. Additionally, encouraging the screening of sexual partners of individuals diagnosed with an STI, including those on PrEP, will help reduce reinfection and transmission risks. Targeted outreach and culturally sensitive screening programs will be conducted for marginalised populations, such as the Orang Asli and Bumiputra communities in Sabah and Sarawak, who may face barriers to accessing healthcare. Raising awareness within these groups about the importance of STI screening, early treatment, and the risks of untreated infections is essential to improving health outcomes and preventing further transmission.

Priority: 1

iii. Strengthening screening activities for STIs among the general population, especially blood donors, to ensure blood safety and reduce transfusion-transmissible infections

This strategy focuses on implementing comprehensive STI screening programs within the general population, with a particular emphasis on blood donors, to prevent the transmission of infections through blood transfusions and enhance public health safety. The plan ensures that all blood donors undergo thorough screening for STIs such as syphilis, HIV, and hepatitis B and C, integrating these protocols into routine blood safety measures. To further normalise STI testing and reduce stigma, public health campaigns will be launched encouraging routine STI screenings as part of annual health check-ups, especially targeting sexually active individuals. Additionally, STI screening will be incorporated into broader health initiatives, such as wellness programs or during medical visits for other conditions, making it more accessible and routine for the general population. Collaboration with educational institutions and employers will promote voluntary screening events in non-clinical, community-friendly settings, encouraging regular testing among students, teachers, and workers. This approach aims to make STI screening a normalised, widespread practice that improves public health outcomes.

Priority: 1

iv. Availability of accurate Point-of-Care Tests (POCT)

This strategy ensures the widespread availability and use of POCT for STIs, enabling rapid, accurate diagnosis and immediate treatment. Primary healthcare clinics will introduce POCT, allowing individuals to quickly test for and diagnose high-prevalence STIs like syphilis,

gonorrhoea, and chlamydia. Healthcare providers will receive training to use POCT effectively, interpret results accurately, provide counselling, and administer immediate treatment.

To improve accessibility to accurate STI diagnosis, the POCT must be made more affordable or free, especially for key and vulnerable populations facing financial barriers by the MOH. This approach enhances early detection and treatment, helping to reduce the spread of STIs and improve public health outcomes.

Priority: 1

v. Availability of newer screening tests for various STIs

This strategy focuses on introducing and making advanced screening technologies available for STIs to enhance the accuracy and comprehensiveness of diagnostic efforts. New diagnostic tests, such as nucleic acid amplification tests (NAATs), will be implemented to detect infections like gonorrhoea, chlamydia, and trichomoniasis with greater precision. Investments in multiplex tests, which allow for detecting multiple STIs from a single sample, will increase efficiency and reduce patient burden. To support these innovations, upgraded laboratory infrastructure and training of lab personnel to use advanced diagnostic equipment effectively. Pilot projects and research initiatives will be supported to evaluate the success of these technologies in various settings, including rural areas and communities with limited access to healthcare. Additionally, partnerships with private healthcare providers will be encouraged to ensure these advanced diagnostic tests are available in public and private clinics, broadening the reach and improving STI diagnostic capabilities across the healthcare system.

Priority: 1

3.2.3 Access to Diagnostic, Treatment and Care Services

This strategy aims to ensure that individuals in Malaysia have better access to diagnostic services, timely treatment, and comprehensive care for STIs. By focusing on early detection, effective treatment, and appropriate follow-up care, the plan aims to reduce the burden of STIs in the population and improve public health outcomes.

Recommendations:

i. Improve coverage and early access to STI diagnostic tests, treatment, and care at primary care, hospitals, and private sectors

This strategy ensures that individuals can easily access STI diagnostic services and treatment across all healthcare settings, making testing and care more widely available. To achieve this, the number of healthcare facilities offering STI services, particularly in rural or underserved areas, will be increased. Collaborations with private healthcare providers will be strengthened, integrating STI testing and treatment into routine care to make these services more accessible. Mobile health initiatives will also be developed to reach populations that face barriers to accessing traditional healthcare facilities, such as those in remote areas or marginalised communities. Community-based STI screening programs will also be promoted to encourage early detection and timely treatment, helping to reduce the spread of infections and improve overall public health.

Priority: 1

ii. Regularly update case management guidelines to reflect advances in treatment, diagnostics, and development of resistance to medicines

This strategy ensures that healthcare providers use the most current and accurate information for diagnosing and treating STIs. To accomplish this, a national task force or expert committee will be established to regularly review and update case management guidelines, ensuring they reflect the latest research and best practices. These guidelines will include protocols for managing drug-resistant STIs and integrating new, more effective treatment options. Continuous professional education and training for healthcare workers will be provided to ensure they are familiar with the updated protocols and equipped to deliver the highest quality care. This approach will enhance STI management and improve patient outcomes across healthcare settings.

Priority: 1

iii. Scale up syndromic management approach in primary health care

This strategy focuses on enhancing the capacity of primary healthcare providers to manage STIs based on the symptoms a patient presents, even when laboratory diagnostics are unavailable. It involves training primary care providers in the syndromic management approach, which allows them to diagnose and treat STIs by focusing on the symptoms rather than waiting for lab results. To support this, treatment algorithms and decision-making tools will be available at all primary care centres to guide healthcare providers in accurately diagnosing and treating patients. Additionally, the effectiveness of this syndromic management approach will be monitored and evaluated by tracking patient outcomes and rates of STI transmission. This approach is particularly beneficial in settings with limited access to diagnostic facilities, ensuring timely and effective treatment.

Priority: 1

iv. Expedite partner treatment and voluntary provider-assisted referral of sexual partners

This strategy aims to prevent the reinfection of individuals who have been treated for STIs by ensuring that their sexual partners also receive timely treatment. To achieve this, protocols that encourage treated individuals to inform their partners about the need for testing and treatment and provide support in facilitating their access to care will be implemented. Voluntary, provider-assisted partner notification and referral services will be offered, ensuring privacy and confidentiality are protected throughout the process. Additionally, partner notification tools, such as anonymous digital alerts, will be promoted to reduce stigma and make it easier for individuals to engage in the process, ultimately helping to reduce the spread of STIs and prevent reinfection.

Priority: 1

v. Ensure availability of medicine and adherence to treatment

This strategy focuses on ensuring a consistent supply of medications for STIs and promoting adherence to treatment regimens to prevent complications and the development of drug resistance. To achieve this, the supply chain management system for STI medications, including antibiotics and antivirals, will be strengthened across public and private healthcare

facilities to ensure continuous availability. Additionally, reminder systems, such as SMS or app-based alerts, will be implemented to encourage patients to follow their prescribed treatments. Adherence counselling and support will also be provided, especially for individuals at high risk of non-adherence due to complex social or economic challenges. These actions aim to prevent treatment interruptions, reduce the risk of complications, and limit the spread of drug-resistant infections.

Priority: 1

vi. Innovate contact tracing

This strategy focuses on modernising the contact tracing system to improve the identification of individuals at risk of STIs and reduce their transmission. By leveraging technology such as mobile apps and electronic health records, contact tracing efforts can be streamlined, making it faster and more efficient to track and notify individuals who may have been exposed to an STI. Innovative tools, like anonymous notification systems, will be introduced to inform individuals about potential exposure without revealing identities, thus reducing stigma and encouraging engagement. Additionally, partnerships with NGOs and community health workers will be strengthened to support contact tracing efforts, particularly in marginalised groups, ensuring that at-risk populations are reached and provided with the necessary care. This modernisation aims to make contact tracing more effective and inclusive, ultimately reducing the spread of STIs.

Priority: 2

3.2.4 Quality Strategic Information, Monitoring and Evaluation and Research

This strategy emphasises the importance of collecting, analysing, and using high-quality data to inform public health decisions regarding STIs in Malaysia. It aims to enhance the country's capacity for monitoring, evaluating, and researching STI trends and interventions, ensuring that the national response is evidence-based and adaptable to changing infection patterns and treatment efficacy.

Recommendations:

I. Strengthen STIs notification from primary health clinics, private GPs, government and private hospitals

This strategy aims to improve the accuracy and comprehensiveness of STI data by ensuring timely and consistent reporting from all healthcare providers, both public and private. Standardizing STI reporting procedures across all healthcare settings is essential to ensure that notifications are accurate and submitted promptly. Healthcare providers, including doctors, nurses, and other staff, will receive training on the importance of STI notification and the correct methods for reporting cases to the national database. To streamline this process, an electronic notification system will be implemented, allowing for real-time reporting, reducing delays and enhancing data quality. Additionally, increased collaboration between the Ministry of Health, private healthcare providers, and clinics will ensure seamless reporting and foster accountability in STI management. These efforts will lead to more reliable data, improving public health decision-making and the overall response to STI control.

Priority: 1

II. Develop case investigation forms for STIs that can be used for appropriate public health measures

This strategy focuses on creating standardised forms for comprehensive case investigations of STIs to enhance contact tracing, outbreak control, and public health interventions. These forms will be designed for each STI to capture crucial epidemiological data, such as patient demographics, risk factors, and sexual behaviours. The forms will be user-friendly and integrated into existing health information systems to reduce the administrative burden on healthcare providers. Data collected through these forms will be used to guide targeted public health actions, such as more effective contact tracing, partner notification, and identifying high-risk groups. Additionally, the forms will be regularly updated to reflect new trends in STIs, emerging drug resistance patterns, and updated treatment protocols, ensuring they remain relevant and effective for public health management.

Priority: 1

III. Develop a monitoring and evaluation framework that complements the NPSTIs (National Plan for STIs)

This strategy focuses on establishing a robust M&E system to track the progress of STI control efforts and assess the effectiveness of interventions. A comprehensive M&E framework will be developed to align with the National Strategic Plan for STIs (NSPSTIs), tracking key indicators such as STI prevalence rates, treatment outcomes, and access to services. Clear and measurable targets for reducing STIs will be set based on baseline data and aligned with global goals to eliminate STIs as public health threats by 2030. Periodic evaluations and data reviews will assess progress towards these targets, allowing for adjustments and optimisation of strategies where necessary. Dashboards and reporting tools will be developed to provide real-time updates, ensuring stakeholders are informed, and the process remains transparent and accountable. This system will enhance the effectiveness of STI control programs and ensure they are responsive to changing trends and needs.

Priority: 1

IV. Promote and support research and partnerships to move towards evidence-based STI response

This strategy emphasises fostering innovation in preventing, diagnosing, and treating STIs by ensuring that all strategies are based on the latest scientific evidence. To achieve this, academic institutions, public health organisations, and private sector partners are encouraged to collaborate on research projects that address critical knowledge gaps, such as drug resistance, behavioural factors driving STI transmission, and new prevention technologies. Securing funding and resources for research will be prioritised, focusing on syndromic management, vaccine development, and advanced diagnostic tools. Platforms such as conferences, publications, and digital repositories will be created to share research findings, ensuring all stakeholders can access the most up-to-date evidence. Additionally, collaboration with international organisations and researchers will help Malaysia stay informed about global STI trends and best practices, allowing the country to adapt these insights to its unique context and needs. This approach will drive continuous improvement in STI management and public health outcomes.

Priority: 1

3.2.5 Capacity Building and Enhancement.

i. Strengthen capacity building and knowledge about managing STIs among healthcare providers

This strategy focuses on equipping healthcare providers, including doctors, nurses, pharmacists, and allied health workers, with the most up-to-date knowledge and skills to diagnose, treat, and prevent STIs effectively. Continuous professional development (CPD) programs will be developed to cover the latest guidelines, treatment protocols, and advancements in STI management, including strategies for addressing drug resistance and emerging infections. To ensure consistent knowledge transfer, workshops, webinars, and seminars will be conducted for healthcare staff across both public and private sectors, focusing on syndromic management, patient counselling, and laboratory diagnostics for STIs. Updated clinical guidelines and management protocols will be distributed to all healthcare facilities to ensure best practices are followed. Additionally, hands-on training and mentorship programs will be implemented in primary healthcare settings, hospitals, and private clinics, allowing healthcare providers to practice and improve their skills. Specialised courses will also be offered to providers in high-burden areas or those working with key populations, such as sex workers and MSM, focusing on culturally sensitive care and tailored treatment strategies for these at-risk groups. This comprehensive approach aims to improve STI care and outcomes across the healthcare system.

Priority: 1

ii. Improve knowledge of NGO Community Health Workers (CHWs) on STIs for adequate and correct dissemination of information to the community

This strategy focuses on enhancing the capacity of NGO CHWs to effectively communicate accurate and relevant information about STIs to the community, particularly vulnerable and high-risk populations. To achieve this, CHWs will receive training on the basics of STIs, including symptoms, prevention methods, and available treatment options, ensuring they can confidently provide up-to-date information. CHWs will also be equipped with communication and peer education skills to facilitate empathetic, non-judgmental conversations about sexual health, address stigma, and promote STI services in a culturally sensitive manner. They will be provided with easily understandable and locally appropriate educational materials, such as

brochures, fact sheets, and posters, to help disseminate accurate information. CHWs will be encouraged to participate in outreach activities, such as health talks, mobile clinics, and community health fairs, to raise STI awareness in their communities. To ensure CHWs remain informed on new STI prevention and care developments, support mechanisms like refresher training, supervision, and feedback sessions will be established, fostering continuous learning and improvement.

Priority: 1

iii. Enhance collaboration and partnership between government clinics/hospitals, private clinics/hospitals, and NGOs

This strategy emphasises strengthening the partnerships between public and private healthcare sectors and NGOs to improve coordination in delivering STI services, expand access to care, and share resources and expertise. To achieve this, formal agreements and partnership frameworks will be established to clarify each stakeholder's roles, responsibilities, and expectations in STI services. Joint training and capacity-building sessions will bring together healthcare providers from both public and private sectors and NGO staff to foster collaboration and knowledge-sharing across sectors. Strengthening referral networks will ensure that individuals diagnosed with STIs can be seamlessly referred to the appropriate level of care for diagnosis, treatment, and counselling. Additionally, resources such as testing kits, educational materials, and medications will be shared between government facilities, private healthcare providers, and NGOs, particularly in resource-limited settings. Joint outreach programs will be facilitated for community-based STI screening, health education campaigns, and partner notification efforts. Lastly, platforms for regular information sharing and reporting will be developed, ensuring all stakeholders are informed about STI trends, treatment advancements, and prevention strategies, leading to more cohesive and effective public health efforts.

Priority: 2

4 Conclusion

The mid-term review of Malaysia's **NSPEA 2016-2030** underscores the urgent need to scale-up testing and ARV treatment to meet the **95-95-95 treatment cascade goals**. A significant challenge remains the concentration of the HIV epidemic within KP, many of whom are not accessing healthcare services due to stigma, discrimination, and fear of exposure. Stronger collaboration between government agencies, healthcare providers, and community-based organisations is essential to bridge these gaps.

Critical components of the plan include mitigating sexual transmission among key populations, engaging children, adolescents, and young people in HIV prevention, and eMTCT. Addressing barriers such as stigma and discrimination toward PLHIV—especially self-stigma—remains a priority. Additionally, efforts must be made to improve the turnaround time for infant HIV testing, ensuring early diagnosis and intervention. Leveraging digital technology and securing increased funding for advocacy programs will be instrumental in sustaining momentum and combating stigma at both societal and individual levels.

In this report, we also integrate it with The **National Plan of Action for Ending STIs by 2030**, which provides a comprehensive framework for tackling the rising incidence of STIs in Malaysia. By aligning with global health objectives and employing a targeted, evidence-based approach, the plan aims to significantly reduce the incidence of significant STIs such as gonorrhoea, syphilis, chlamydia, and HPV. The strategies outlined emphasize prevention, early diagnosis, timely treatment, and comprehensive care for high-risk populations and the general public.

Key pillars of the plan include multi-sectoral partnerships, capacity building, and the development of robust monitoring and evaluation systems. The plan also highlights the importance of integrating STI and HIV prevention strategies. Expanding access to diagnostic services and intensifying public awareness campaigns are crucial in achieving these objectives.

The plan's success hinges on sustained collaboration between government bodies, healthcare providers, NGOs, and community stakeholders. By prioritizing education, increasing screening services, and ensuring access to high-quality care, Malaysia is well-positioned to curb the spread of STIs, enhance public health outcomes, and realize its vision of a nation free from the burden of curable STIs by 2030.

.

5 Main messages from the MTR

1. **Progress in HIV Response:** Malaysia has made notable advancements in tackling HIV, particularly in reducing transmission via injecting drug use, increasing HIV testing and treatment, and preventing mother-to-child transmission. However, addressing the growing sexual transmission, especially among key populations like MSM (men who have sex with men), remains a pressing challenge.
2. **Shifts in HIV Transmission:** The HIV epidemic in Malaysia has plateaued in recent years, with a shift from injecting drug use to sexual transmission, particularly among MSM. This shift underscores the need for tailored interventions targeting sexual transmission in key populations.
3. **Progress and Successes:**
   - Malaysia has made progress in reducing HIV infections, with a 50% decline in new cases (from 21.8 per 100,000 in 2000 to 10.3 per 100,000 in 2017).
   - Malaysia's progress toward the UNAIDS 95-95-95 goals is encouraging but requires more effort. While 81% of people living with HIV know their status, only 68% are receiving ART, indicating a significant gap in the treatment cascade.
   - The country has successfully EMTCT of HIV, meeting global targets.
4. **Rising STIs Among Key Populations:** Syphilis and gonorrhoea rates are rising, particularly among young adults and key populations such as MSM, transgender individuals, and sex workers. High-risk behaviours, misinformation, and gaps in sexual health education exacerbate the spread of STIs, requiring urgent intervention.
5. **Antimicrobial Resistance (AMR):** The growing threat of antimicrobial resistance, particularly in gonorrhoea treatment, poses a significant public health risk. Combating AMR and its impact on STI treatment requires stronger surveillance and coordinated efforts.
6. **Challenges and Priorities:**
   - HIV: Further investments in testing, ARV treatment, and prevention are needed. Focus areas include scaling up testing, reducing sexual transmission, enhancing HIV management in prisons, and addressing stigma and discrimination.
   - STIs: Integrating STI services with HIV programs is crucial to address both infections. Increasing screening coverage, improving diagnostic technologies, and enhancing access to STI care are priorities.

7. **Stigma and Discrimination:** Reducing stigma toward people living with HIV and STIs remains a critical challenge. Expanding advocacy efforts and leveraging digital technologies to fight stigma is essential to ensuring that affected individuals can access healthcare without fear of discrimination.
8. **Youth Engagement:** Adolescents and young people are crucial to the success of HIV and STI prevention programs. Strategies should focus on improving sexual health education in schools, using multimedia campaigns, and fostering a supportive environment for young people.
9. **Innovative Healthcare Solutions:** The use of telemedicine, self-testing kits, and digital tools offers opportunities to enhance access to STI and HIV services, particularly for underserved or stigmatized groups.
10. **Collaboration and Partnerships:** Strengthening partnerships across the public and private sectors, NGOs, and community organizations is vital for expanding the reach of diagnostics, treatment, and prevention services. Cross-sector collaboration will also improve data collection, capacity building, and resource sharing.

Overall, the report underscores the importance of prioritizing these recommendations and fostering collaboration between government agencies, educational institutions, NGOs, and other stakeholders to achieve Malaysia's goals of ending AIDS and Ending STIs by 2030 and ensuring the well-being of affected communities.

6 Annexes

Annex 1: List of Participants, Consultative meeting, 2 – 5 July 2023

Mid-Term Review: Fast Tracking 2016-2020

National Strategic Plan on Ending AIDS 2016-2030

NO.	NAME	ORGANISATION
Facilitators/Secretariat		
1	Dr Fazidah Yuswan	MOH (HIV/STI/Hep C)
2	Dr Mazliza Ramly	MOH (HIV/STI/Hep C)
3	Dr Zailatul Hani Mohamad Yadzir	MOH (HIV/STI/Hep C)
Group 1: HIV Testing & Treatment		
1	Dr Janizah Abd Ghani	JKN PULAU PINANG
2	Dr Nur Hairi Nahar	JKN MELAKA
3	Dr Narul Aida Salleh	KK KUALA LUMPUR
4	Dr Suresh Kumar A/L Chidambaram	HOSPITAL SG BULOH
5	Dr Wong Ling Ying	KK BDR TUN RAZAK
6	Dr Chai Phing Tze	MOH (HIV/STI/Hep C)
7	Dr Noor Haslinda Ismail	BPKK
8	Pn Mardhiah Kamal	BAPF
9	Pn Rohana Hassan	BPKA
Group 2: Plan of action for STI		
1	Dr Norliza Ibrahim	MOH (HIV/STI/Hep C)
2	Dr Ruziana Miss	JKN SARAWAK
3	Dr Sathya Rao	HUSM, KELANTAN
4	Nur Amalina Zaman	LABLINK SDN BHD
5	Dr Khairil Erwan Khalid	HKL
6	Dr Azura Mohd Affandi	HKL
7	Dr Sahlawati Mustakim	HOSPITAL SG BULOH
8	Dr Zakiah Mohd Said	BPKK
9	Dr Mohd Izzar Nawari Abdul Khani	MOH (HIV/STI/Hep C)
Group 3: HIV Prevention among MSM		
1	Dr Mohd Hazwan Baharuddin	JKN KELANTAN
2	Dr Mazliza Ramly	MOH (HIV/STI/Hep C)
3	En Wan Azuan Wan Ali	CCM
4	En Dhia Rezki Rohaizad	CCM
5	Pn Siti Rosyati Mohd Zaini	MAC
Group 4: HIV Prevention among TGW		
1	Dr Natalia Che Ishak	MOH (HIV/STI/Hep C)
2	Dr Peter Chang Chung Meng	JKN PERAK

NO.	NAME	ORGANISATION
3	Abdul Muizz Che Zaini @ Jailani	MAC
4	Emma Zailainiey	MAC
5	Nabil Razali	CCM
6	Khartini Slamah	CCM
Group 5: HIV Prevention among FSW		
1	Dr Rohemi Abu Bakar	JKN PERLIS
2	Dr Haseanti Hussien	JKN SABAH
3	Dr Muhammad Shafiq Sulaiman	JKN LABUAN
4	Muhammad Ishak Hasdi	MAC
5	Alyah Marzuki	MAC
6	Noorfaraien Parman	CCM
7	Nana Sing	MAC
8	Lee Sook Fong	MAC
Group 6: HIV Prevention among PWID		
1	Dr Azlina Azlan	JKN KEDAH
2	Aina Mazwin Mohamed Radzi	MOH (HIV/STI/Hep C)
3	Prof Dr Wan Zahirudin Wan Mohammad	USM
4	Dr Ravi Ramadah	AADK
5	Dr Nur Afiqah Mohd Salleh	MAC
6	Mohd Hafiz Mohd Hoshni	PENJARA KAJANG
7	Muhamad Alem Hakimi Mohd Nordin	PENJARA KAJANG
8	Mohamed Salim Gulam Mohamed	PDRM
9	Ganeshraoo	PDRM
10	Azhari Said	MAC
11	Mohamad Fitri Abdul Halim	MAC
12	Md Khairu Che Imran	MAC
Group 7: Children/Adolescents/Young Population		
1	Dr Muhammad Alimin Mat Reffien	JKN JOHOR
2	Dr Mohd Fahmi Ismail	JKN PAHANG
3	Dr Muhammad Firdaus Ujang	BPKK
4	Dr Hasnah Shuhaimi	KPM
5	Muhammad Shabil Muhafiz Harun	JAKIM
6	Azman Mohamed	MOH (HIV/STI/Hep C)
7	Zainudin A Hamid	BPK
8	Veronica Dominic	KPWKM
9	Md Yusralhakim Yusof	MAC
10	Nur Hairunnisa Kamarudin	KPM
Group 8: EMTCT & Stigma & Discrimination		
1	Dr Mahani Nordin	JKN TERENGGANU
2	Dr Raudhah Abd Rahman	JKWPKL & P
3	Dr Mazliza Ramly	MOH (HIV/STI/Hep C)
4	Dr Norliza Ibrahim	MOH (HIV/STI/Hep C)

NO.	NAME	ORGANISATION
5	Dr Chai Phing Tze	MOH (HIV/STI/Hep C)
6	Dr Muniswaran Ganesham@Ganeshan	HOSPITAL TUNKU AZIZAH
7	Dr Choo Chong Ming	HOSPITAL PULAU PINANG
8	Dr Khayri Azizi Kamel	IMR
9	Dr Zailatul Hani Mohamad Yadzir	MOH (HIV/STI/Hep C)
10	Ishmah Hana Isharudin	MKAK
11	Hasniza Mat Reffein	BPKK
Group 9: Quality Strategic Information and its use through M&E and Research		
1	Syahirah Jhan Abdul Halil Khan	MAC
2	Dr Mazliza Ramly	MOH (HIV/STI/Hep C)
3	Wan Mohd Nasrun Wan Sulaiman	MOH (HIV/STI/Hep C)
4	Muhammad Aziq Hamidun	MAC

Annex 2: Mid-Term Review 2022

NATIONAL PLAN OF ACTIONS 2016-2023

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
STRATEGY 1: TESTING AND TREATMENT TO END AIDS				
1.1	**Increase HIV testing uptake in key affected population and PLHIV-indicator conditions (STI, Herpes Zoster, Hepatitis B, IDU on MMT)**			
	a) Capacity building for health care providers, including those within institutionalized setting (such as prisons) and other government health care (such as LPPKN) on HIV testing and counselling (HTC) b) Providing HIV/STI awareness and HIV screening during family planning counselling	MOH (State), Prison, LPPKN, CSO/MAC, GPs	a) HTC training courses (including awareness and desensitization for non-health front-line staff) b) Implementation of HIV testing services in non-health settings	State to conduct regular training sessions involving non-health agencies – LPPKN
1.2	**Strengthen HIV testing services in health facilities**			
	a) Revision of current HTC guidelines that normalizes HIV testing in all health facilities (Government & Private) b) Enhance Provider Initiated Testing and Counselling (PITC) services	MOH, GPs	a) HIV testing algorithm revised in 2019. b) HIV Counseling Module revised in 2019. c) New circular on HTC and PITC in 2019 d) Pilot 2-RTK strategy in Kuantan in 2019	Counseling Guideline is currently under review by MOH
1.3	**Scale-up community-based HIV screening centres**			
	a) Increase Community-based testing (CBT) - credential CSO and training (HIV counselling) b) Review guideline to simplify HIV testing algorithm	MOH, CSO/MAC	a) No. of CBOs conducting HIV screening b) No. of HIV screening conducted disaggregated by KP	Recommendation: 1 health clinic per district with complete IHTC facilities as referral centre for CSO linkage
1.4	**Strengthen linkage to care**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Rapid initiation of ART guided by 'The Rapid ART Initiation Protocol' (TRIP) b) Strengthen 'Case Management Programme' c) Enhance the function of National AIDS Registry (NAR) to include patient monitoring	MOH, MASHM, GPs, CSO/MAC	a) TRIP developed in 2019. b) 'Community Case Management program 2.0' established in 2019. c) Increased PLHIV linked to care – 80% (2019), 85% (2020), 90% (2021) d) Pilot 'HIV Care and Treatment Cascade' in 2019-2020 (KIV)	a) HIV Care and treatment cascade pilot project dependent upon availability of fund b) Community Case Management 2.0 is currently underway
1.5	Increase coverage of PLHIV on ART			
	a) Increase number of treatments centres: - Integrated HIV Treatment Centres (IHTC)[1] - Private clinics b) Ensure continuum of care outside the primary treatment centre through 'ART Card' c) Provision of ART treatment in all MMT clinics d) Provision of ART (including co-infections and MMT) in closed settings e) Revise role and function of paramedics - Task shifting; applicable if agreeable by patients f) Differentiated ART Delivery (pilot)	MOH, GPs MASHM, MOH MOH MOH, CSO/MAC, Prison, NADA MOH MOH, CSO/MAC	a) Number of districts with IHTC increased to 50% (2020), 60% (2022), 80% (2025), 100% (2030) b) HIV treatment literacy training module developed (HIV Connect launched in 2018). c) Increase ART coverage to 55% (2019); 60% (2020), 70% (2025); 90% (2030) d) Paramedics review HIV patients with suppressed viral load and stable on ART by 2020 e) 1 pilot project of DSD in 2019	Develop guideline for CBO-based screening and treatment. - CBOs with doctors: recommend screening and testing including requirement for notifications and referrals for treatment initiation at KK or hospitals. - CBOs without doctors: recommend referrals to IHTC/KK or hospitals for treatment.
1.6	Adopt current MOH guideline on first line treatment regime			

[1] Component of integrated HIV clinic includes:

(i) FMS who has undergone attachment at ID clinic; (ii) Paramedic HIV counsellors / trained in HIV management; (iii) RVD MTAC Pharmacist; (iv) Peer support / outreach worker from CBO; (v) X-Ray facilities to detect TB; (vi) Lab facilities- Basic investigations for STI , TB, CD4 / Viral Load POCT, Basic bio-chemistry / haematology test- RP, LFT, FBC; (vii) Methadone clinic; (viii) Medications- 1st line ARV, Anti TB, Penicillin injection, Ceftriaxone ; (ix) Key Affected Population (TGW, MSM, FSW, MSW) friendly environment

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	Adopt current MOH guideline on first line treatment regime (Malaysian Consensus Guidelines on Antiretroviral Therapy 2017); effort to increase compliance and subsequent retention in care - Use of Single Pill 3-in-1 Combination (SPC) - Get SPC listed in the MOH Formulary (MOHMF)	MOH (Pharmacy)	SPC available in MOHMF	The original POA on the fixed dose combination (Tenofovir + Lamivudine or Emtricitabine + Efavirenz) removed, in view of higher cost compared to existing medications.
1.7	**Decentralization treatment centre to increase access to HIV treatment and improved rate of retention to care for those already on ART**			
	a) Increase the number of paramedics trained in HIV counselling - Standard post-basic training - Training beyond post-basic (HIV, counselling and treatment literacy) – attachment to ID clinics - Retention and proper placement of skill b) Strengthen & increase the number of shelters / halfway house services (job placement and life skills building) for PLHIV c) Scale up treatment peer support programmes and to include outreach services d) Strengthen (expansion of service coverage) of medication supply and delivery to patients	MOH, MASHM CSO/MAC, MWFCD, JAKIM CSO/MAC, MOH MOH (Pharmacy), CSO/MAC	a) HIV Counsellor / assistant counsellor (Pembantu Kaunselor) and pharmacist at every KK with FMS by 2025 b) Paramedic with HIV Counselling post-basic 1 flexi post U29/32/36 per district c) One shelter home / region/ State d) 1 Peer support programmes per IHTC	a) Training beyond the post-basic for two weeks, with Logbook (MASHM to develop module). b) Medication supply and deliver, e.g. Medilock, Courier Pos Laju, and drive through, Differentiated treatment delivery (pilot) In this task-shifting strategy, note the issue of consent and agreement, as well as verification of medication prescription
1.8	**Improve retention and viral suppression through better case management**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Opening Integrated services for PLHIV after office hours to improve retention b) Review guideline for HIV Management in closed settings - Sustain & expand '*Teman*' pilot project c) Shelter home/palliative care services for post release care for TB-HIV patients (halfway house)	MOH MOH, CSO/MAC CSO/MAC, MWFCD	a) 1 clinic/hospital with extended after office service per state in 2019 b) Guideline for HIV Management in closed settings revised (2019) c) PLHIV received ART in closed settings – 50% (2019), 60% (2020), 70% (2021) d) At least one shelter available per state and on demand	a) Currently offered only in Sg. Buloh Hospital (Saturdays); applies to hospital-based treatment centres. b) ART initiation in closed settings pending establishment of 'Teman' (NGO/CBO) functioned as the 'receiver' of PLHIV upon release from institutions.
1.10	**Upscale TB diagnosis and case management**			
	a) Capacity building among CBO on TB information, screening and prevention based on symptoms b) Facilitate early referral to nearest clinics for confirmation c) Implement IPT programme for all newly diagnosed HIV patients without active TB. d) Implement IPT programme for eligible patients. e) Improve availability of point of care test f) Prevent TB transmission among PLHIV in incarcerated settings	MOH, CSO/MAC, prison dept.	a) IPT implementation to achieve 85% by 2020. b) POCT Viral Load available at least 1/state	a) Currently TB sputum collection being piloted in Terengganu. b) Revised Plan of Action specific activities - symptomatic screening; outsourcing of mobile X-ray services in prison (for inmates and staff); on-site sputum collection; infection control; separation of TB patients; application of surgical mask by TB patients during active phase of treatment; standardise training curriculum for Prison and Parole Officers
STRATEGY 2 - IMPROVING THE QUALITY AND COVERAGE OF PREVENTION PROGRAMMES AMONG KEY POPULATIONS				
2.1	**Prevention of HIV transmission through injecting drug use**			
2.1.1	**Promoting behavioural change**			
	a) Capacity building for ORW to improve knowledge on treatment cascade (HIV and co-infection, SRH, OST, testing and treatment)	CSO/MAC, MOH, NADA, Prison Dept.	At least 80% ORW trained in 2019	To include refresher training for ORWs on updated approaches and information, psychosocial counselling component, CBT

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	b) Provide accurate information on HIV and co-infection (Hep C/TB), SRH, OST, testing, ARV treatment and condom to: - NSEP's clients - OKP (Orang Kena Pengawasan) - ODP (Orang Kena Parol) - Prevention induction kit or knowledge pack to new inmates	CSO/MAC, MOH, NADA, Prison	Increase positive behavioural trend through IBBS – safe injecting practices, condom use, enrolment to HIV care and OST	Incorporated into IBBS 2020
2.1.2	**Promote OST buy-in and linkage to care**			
	a) Scale-up OST service delivery - Continuum of care through comprehensive service delivery that provide OST, ARV, co-infections services under one roof - Differentiated OST delivery at CSOs (pilot) - Adopt "NSEP Klinik Kesihatan" model with NGOs operate from health clinic and assist in running harm reduction services at the clinic. - Increase dispensing time to include public holiday and weekends - Accreditation Assistant Pharmacists - Dispensing tasked to paramedics (MA/Nurse) - Expansion of Methadone 1 Malaysia services - Established post-released after care for prisoners and drug rehabilitation centers	MOH CSO/MAC, MOH MOH, CSO/MAC MOH (Pharmacy) MOH (Pharmacy) MOH (Pharmacy) MOH (Pharmacy) CSO/MAC, MOH, Prison Dept, NADA	a) Health clinics providing OST – 40% (2019), 45% (2020); 55% (2025); 65% (2030) b) Comprehensive service delivery for MMT-ART-coinfections – at least 1 IHTC per district c) At least 40 NSEP KK Model in 2020 d) Accredited Assistant Pharmacist increased at Health Clinics – 45% (2020); 60% (2025); 75% (2030) e) Methadone 1 Malaysia services available at health clinic – 60% (2020); 100% (2025)	a) Develop online methadone registry and online M&E system registry. b) Re-visit the measure of methadone therapy adherence. Currently, retention as yearly; to review retention by cohort. c) Scale up OST services to other agencies and the possibility of service provision at selected NGOs. d) Methadone dispensing at integrated pharmacy counters. e) The initiation of methadone therapy as 'other medications', and not necessarily by FMS. f) Amend Poisons (Psychotropic Substances) Regulations 1989 by 2016/2017 to allow task-shifting of Methadone dispensing g) Methadone 1 Malaysia - on-going; requires re-branding h) Evaluation of existing 11 KK Model pending. i) To add value to NSEP KK Model, such as prevention of default cases.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	b) Increase OST/HTC/ARV uptake at existing facilities - Support group at health clinics - NGO Helpline for support - Initiation dose at first encounter - Appointment of liaison officer at Health Clinic and NADA centre - OST defaulter tracing	MOH, MOE, NADA, Prison Dept, CSO/MAC	a) Active NSEP client (opiate users) referred to OST services – 30% (2019); 40% (2020); 50% (2021) b) Active NSEP client referred to VCT services – 80% (2019), 85% (2020); 90% (2021) c) OST defaulter tracing established d) Support group session – minimum 1 session/ 2 weeks/ health clinic e) Helpline established	a) Newly registered OST client will be prescribed with minimum dose (20mg) of Methadone / other OST medication once passed physical examination and without waiting for Liver Function Test (LFT) result.
	c) Review and update SOP/Guideline of OST, NADA, NSEP, Prison, Police for standardization	MOH, MOE, NADA, Prison Dept.	SOP / Guideline reviewed every five years	Next review 2020
	d) Ensure the continuation of OST & ARV in custody (lockup and prison & detention centre). - regular visit and health services at lockup and remand - provide basic health assessment and treatment for clients in the initial custody	MoH, RMP, Prison Department, NADA	Number of detainees examined for OST and ARV in lock up, remand and detention centre to ensure continuum of care & treatment	Strengthening the implementation of continuum of care and treatment in lock-up, remand and detention centres, including annual meeting of Harm Reduction stakeholders.
	e) Monitoring of Methadone diversion	Pharmacy, MOH	At least once a year (report)	No mechanism to monitor diversion; currently no written report from the pharmaceutical service; pharmacists to provide detailed yearly report to MOH; regular inspection of government and non-government health facilities

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
2.1.3	**Strengthen safe injecting practices among hard-core and polydrug users**			
	a) Sustain safe injecting practices among PWID - Awareness on safe injection to clients of NSEP - Frequent local stakeholder meeting - Improve outreach services through provision of: o Sterile water in NSEP kit o First aid kits o Safe disposal of needles/syringes (tong) o HIV prevention package i.e. NSEP, condom o Client education on HIV transmission and injection hygiene	CSO/MAC, MOH	a) Increase active client to 35% (2019), 40% (2025) and 50% (2030) b) Conduct activities/event to sustain NSEP client once every quarter (4 times a year) c) Increase return rate of used needle & syringe to >70% d) Increase number of needle/syringes distributed per client per year to >100	a) Safe disposal bins at NSEP outreach programmes are already in place and on-going. b) Mobile outreach to provide basic medical service by bus, collaborate with NADA and KKM, subject to existing regulations, need to review feasibility within the constraints of regulations - Provide port cleaning to ORW and client - Pre and post survey for each intervention to evaluate the services
2.1.4	**Scale-up ARV among PWID**			
	a) Increase number of PWID on ARV treatment - New guideline for ARV in PWID - Pre-release and post-release support to inmates who are on ARV & OST (e.g. Teman project) using Case Management approach - Capacity building and provision of human resources to provide comprehensive programmes including psychosocial component	MOH, MASHM CSO/MAC, MOH, Prison Dept, NADA	a) Eligible PWID living with HIV receiving ARV – 50% (2020); 70% (2025); 90% (2030) b) Number prisoners released continue ARV c) Number of training sessions d) Number of staffs trained	a) Teman project, pending adequate NGO budget b) Psychosocial component as part of the comprehensive programs, will require addiction experts, addiction counsellors, Master in addiction
	b) Establish drop-in centre (DIC) at NGO office to improve PWID's adherence to ARV treatment.	Ministry Women, Family & Community Development, CSO/MAC, MOH	At least three DICs established by 2030	To pilot DIC in 4 zones, mainly in capital cities; review the feasibility or utilize existing DIC; add-on service for outreach workers at DIC as to dispensing ART.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	c) Peer Support Group - Peer Counsellor from DU and MMT			To conduct a small study to review/assess MMT /ART /Hep C /TB treatment adherence
2.2	Mitigating Sexual Transmission			
	a) Revive the Sexual Transmission Task Force that leads the development of SOP guiding inter-agencies collaboration to upscale prevention efforts in line with NSPEA.	MOH, CSO/MAC, MWFCD, Government stakeholders	a) Gap analysis on sexual transmission of HIV to be conducted (IBBS) b) A working group or Task Force formed	a) A gap analysis on sexual transmission conducted through IBBS 2017 and PSE service in 2018. b) TWG formed in 2017, led by MOH, task force or working group member yet to be identified. c) Terms of reference on this Task Force will be jointly done by MAC and MOH
	b) Capacity building for ORWs and healthcare workers, focusing on: - Prevention, treatment and care cascade of HIV and STI including SRH - PrEP and PEP - Behaviour Change Communication	MOH, CSO/MAC	a) 80% of ORWs trained annually b) 30% of health care workers trained annually	a) Increasing number of foreign FSWs[2], who are unable to get HIV confirmation and treatment b) Local FSWs are operating mobile and cross state - hidden and difficult to approach – consider the use social media
2.3	Mitigating Sexual Transmission among Men having Sex with Men (MSM)			
2.2.1	Increase awareness on HIV and STI testing among the youth			

[2] Foreigners FSW: Foreigners who enter Malaysia legally are not employed for sexual work. However, some of them are forced into the sex trade. This group is screened through outreach and if found positive HIV, we offer them confirmation and treatment at local clinic with their own out of pockets payment. Those who are unable to pay are advised to return for free treatment at their own country.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Implementing SRH education, prevention HIV and STI in schools/colleges - Mobilize school health unit - Activate Prostar b) Internet-based targeted messages/ intervention for high risk young population (peer created content) Social media strategy - Social media campaign using MSM targeted media i.e. Grinder, Hornet, Blued etc	MOE, MOH, KPWKM, JAKIM, KBS CSO/MAC, MOH	a) Prostar programme in school – 50% (2019), 60% (2020), 70% (2021) b) One awareness campaigns in university or Colleges per year per Pejabat Kesihatan Daerah	To include current topics using appropriate tools - substance abuse (MMT/AST/DSB), youth camps, STI / TB co-infection,
2.2.2	**Increased HIV and STI awareness in high risk behaviours**			
	a) Provision of comprehensive package of services i.e. condoms, lubricants, IEC materials, testing, linkage to care, as indicated by WHO 2014 Guideline for key affected populations in high risk venues (etc. saunas, pubs and public gyms such as Celebrity Fitness gyms). - Using social media - Face-to-face - HIV testing - Safer sex kit distribution	Ministry of Housing (PBT), MOH, CSO/MAC, venue operators, PDRM, SKMM (multimedia)	a) Increase MSM reached – 50% (2019), 60% (2020), 70% (2021) b) Pilot new intervention method at public gyms (1 fitness chain, 6 branches in Klang Valley) c) 100 MSM/ORW contacted per month via online with BCC d) 60 MSM/ORW contacted per month via offline with BCC / safer kit	a) To define high risk behaviour MSM – MSM who use substance / chemsex / multiple partner / sero-discordance relationship / frequent sauna / party goers b) 'Reached' - include safer sex information, behavioural change knowledge and HIV test via face to face. c) Measurement of "reached" from social media campaign - hits, views, likes, comments, share. Evaluation can be done via online surveys. d) 'Contacted' - via social media platform.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	b) Promotion of safe sex behaviour - increase access to condoms and lubricants at potential facilities (sauna, karaoke, night clubs, pubs, disco etc.) - Adherence to safe sex practises - Increase awareness o Encourage community to look at positive ways on the usage of condoms o Condom negotiation skill o Changing attitudes about condom o Knowledge, attitude and practice o Risk of chem sex	CSO/MAC	a) Persistent condom uses among MSM to reach 50% (2020), 70% (2025), 90% (2030) b) Assessment project on condom and lubricants usage and attitude among MSMs (social marketing)	
	c) Awareness campaign[3] using social media	CSO/MAC	a) 5,000 MSM used social media to test HIV & STIs every year b) 25,000 MSMs tested for HIV & STI by 2020 using the social media campaigns	

[3] Integrated social media awareness campaign on gay apps with banner advertising that is linked to safer sex videos, referrals to WhatsApp and telephone counselling, web-based resource centre, appointments for community-based testing and case management approach to health clinic testing

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	d) Behaviour modification[4] to risk of acquiring HIV & STIs infection through spiritual support and guidance	JAKIM, MOH, Muslim-based NGOs	a) I session of Mukhayyam / state / year b) 50% MSM reached per state c) A registry of MSM joining the session will be kept by JAKIM and the respective state to take note of changing behaviour of Muslim MSMs - Reduction of number of partners - Abstinence from anal sex - Increase knowledge on the issue of HIV / AIDS and reduce the risk of new HIV infections	Ongoing project with JAKIM
2.2.3	**Increase uptake of HIV test & and proactive/asymptomatic STI testing**			
	a) Innovative use of mobile HIV and STI test	MOH (Sabah), CSO/MAC	1 Pilot project in Kota Kinabalu (Sabah) to conduct HIV & STI testing among MSMs and transgenders	Based on AFA's mobile testing in Singapore. See AFA 2013 Performance Report http://www.afa.org.sg/wordpress/wp-content/uploads/mts/afa-mts-report-2013.pdf
	b) Exploring the feasibility of integrating HIV self-testing (HST) as part of prevention - Implementation – home vs CBO - Emotional preparation - Linkage to care - Online to offline	CSO/MAC	1 pilot project on the feasibility of "HIV self-testing"	Pilot by KLASS 2019

[4] The objective is to expose and 1) guide Muslim MSMs to perform religious obligations, 2) provide knowledge and awareness of the health especially HIV and other infectious diseases, 3) provide guidance and motivation to improve the skills of identifying, guiding and giving spiritual awareness through religious approach (tawhid) to face the challenges of life and abandon the practice of unnatural sex, 4) and eliminate stigma and discrimination among religious groups and communities with the surrounding communities. *Classes are held in the form of camping for 3 days 2 nights (i.e. Mukhayyam). Completion of a spiritual awareness, knowledge about health, outdoor activities / sports*

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	c) Facilitate referrals through case management approach / client-centred approach (case workers facilitate clients to come forward for testing at health clinics or drop-in-centers)	MOH, CSO/MAC	1 health clinic per state will run this project. Among the key screenings to be done include the following: i. HIV testing ii. STI screening	On-going Case management for outreach - case worker currently divided to two sections. 1. Outreach (including testing) 2. Case management Opportunity to streamline outreach programmes by NGO working together with MOH program e.g. Treatment Adherence Programmes (TAPS) with case management.
	d) Expansion of HIV screening at private health facilities and labs[5]	MOH, CSO/MAC, Private Practitioner Association, MMA	Number of private facilities provide HIV testing	MAC together with MASHM are having collaboration with corporate organisation i.e. pharmaceutical company to train GPs in providing HIV / AIDS service in their settings (including PrEP).
	e) Provider initiated testing and counselling (PITC)	MOH	a) Increase number of HIV and STI test – 85% (2019), 90% (2020), 95% (2030) b) New Guideline for HIV test	a) Circular and guideline for HIV testing b) Review of the HIV testing algorithm
	f) Screening of minors (address policy issues pertaining to Child Act under the purview of MWCFD)	MOH (Family Health), CSO/MAC, JAKIM	Policy brief on screening of HIV and STI for minors (reinterpret policy of testing for minors)	Refer “Garis Panduan Kesihatan Remaja” by BPKK 2012 - Children under 18 can proceed with HIV testing with approval from 2 medical officer.
2.2.4	**Prevention of infection through Pre and post exposure prophylaxis**			

[5] Expanding HIV and STI testing in private hospitals/GPs and robust data surveillance, ensure the confidentiality of clients when engaged in services, revisit HIV testing policy in government community health clinic setting, ensuring paramedics at health clinic/hospitals are trained to conduct pre-post HIV counseling, prevention in HIV and STI, treatment and support counselling

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Pre-Exposure Prophylaxis (PrEP) - Positioning Paper on PrEP's feasibility in Malaysia - Pilot implementation study on PrEP (PrEP cost-borne by clients)	CSO/MAC CSO/MAC, UMMC, UNAIDS	a) Number of GPs providing PrEP services b) Number (%) of MSM on PrEP	a) PrEP demonstration project on going until 2019 b) PrEP/PEP guidelines published in 2017 (MASHM) c) PrEP is outlined as prevention method in NSPEA 2016-2030
	b) Post Exposure Prophylaxis (PEP) - Pilot CSOs, Private GPs, and hospitals for PEP (PEP cost borne by clients) - Revise the PEP policy and key population (MSM) eligibility for PEP - Central sourcing of PEP to reduce the price of PEP	MOH, CSO/MAC, MASHM, MMA, Malaysian Primary Care Association of Malaysia (MPCAM)	a) 1 pilot study on PrEP/PEP at 1 CBO, 1 GP, 1 Hospital (HSB) b) Revision on the guidelines on PrEP and PEP by the Malaysian AIDS Council and Medical Development Div. of MoH.	a) Guidelines for occupational exposure are available in 2017. However, guidelines for sexual mitigation PEP is not yet available in Malaysia. b) After the assessment result available in 2019, further discussion needed with Family Health Development Division and Pharmacy Division to implement the service delivery.
	c) Capacity building on PrEP and PEP - Training for CSO, and health providers - Development of IEC and awareness programme on PrEP and PEP	CSO/MAC, MOH	1 Training workshops on PrEP and PEP conducted / year	PrEP syllabus will be part of the case worker training module in the case management program.
2.2.5	**Managing drug dependency in MSM community**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Pilot intervention for MSM with drug use (peer support, psychosocial support, harm reduction paradigm using case management approach) b) Capacity building on management of substance use (FMS, other health providers, NGOs) c) BCC materials development for management of drug use (harm reduction based) d) Collaboration with psychiatrists in referral and management of MSM with drug use	MOH, CSO/MAC	a) IEC materials on polysubstance abuse and the risk of acquiring HIV infection developed b) Workshops on polysubstance abuse and the risk of acquiring HIV infection among the CBOs conducted	a) A qualitative study on the usage of recreational drugs (chem sex) has been done by UMMC/CERIA, by Dr Howie in 2017. Report is not yet published but will be circulated soon. b) There is a need to integrate/collaborate etc. of activities and programmes by HIV / AIDS sector, MAC/other agencies with NCD sector regarding this matter.
2.2.6	Expand Care and Support			
	a) Self-help peer support - adherence support, counselling, treatment literacy including serodiscordant couples b) Tackling Discrimination - Module on Ending Stigma and Discrimination	MOH, CSO/MAC, JAKIM	1. 2 Health Clinics / state with peer support groups by 2020 2. Training sessions once a year 3. Stigma Module developed	a) MSM Poz, KLASS, FHDA, - Module for Health Care Workers (HCW)— The Time Has Come - Training Package for Healthcare Providers, UNDP 2013 b) Module HOPE – in the finalization stage
2.3	Mitigating Sexual Transmission among Female Sex Workers			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
2.3.1	**Upscaling coverage of prevention services**			
	a) Retaining client in the programme through support group sessions	CSO/MAC, MOH	a) Training module developed b) 50% clients are retained in the programme (6x/year) c) 1 support group session/month	Sessions coupled with other activities/ services such HIV info session, legal aid, HIV/STI screening, SRH info and services[6]
	b) Expansion of outreach sites beyond traditional settings (street/venue-based): - Maintain existing peer-peer approach - Social media e.g. FB, TAGGED, WECHAT - Smart partnership using 'Health Clinic Model'	MOH, CSO/MAC	a) FSW reached – 50% (2019), 60% (2020), 80% (2030) b) Number of Health Clinics Model providing FSW programme – 20 (2019), 30 (2020), 50 (2030)	**a)** To encourage more ORW among the FSW to ensure targeted peer support is given **b)** Social media is not a popular choice among FSW as they tend to work in silo **c)** Challenges in finding committed organizations championing FSW
	c) Increase uptake of VCT / STI screening: - Expansion of Community-based testing (CBT) - Promotion of HTC in social network - addition to the existing approach (peer to peer).	CSO/MAC, MOH	FSW tested and know status – 90% (2020), 95% (2030)	IBBS regular survey – next in 2020
	d) Increase uptake of SRH services among FSW - Active promotion of SRH - Incorporate VCT	NGO, MOH, FRHAM, LPPKN	FSW received SRH services - 30% (2020), 80%b (2030)	
2.3.2	**Condom and lubricant programming**			

[6] Other activities such as beauty course, opening of bank account, getting admission in the school for children, living skills (baking, sewing) could be organised on a regular basis to attract the clients.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) BCC intervention - Condom promotion for consistent safe sex with regular and non-regular partners[7] through condom promotion - Substance and alcohol prevention and management	NGO, MOH, JAKIM, NADA	a) 90% of reached FSW using condom by 2020 b) <10% of FSW consume alcohol or take drugs before sex (IBBS)	
	b) Capacity building - Paralegal training for ORW and community leaders	NGO, MOH, Bar Council & RMP	a) 2 training/year b) 80% of ORW trained.	Involvement of legal aid centre at state level
2.3.3	Linkage to Treatment, Care and Support			
	a) Strengthen peer support program	NGO, MOH	a) 90% of FSW HIV+ linked to treatment/care. b) Number of case workers trained	
	b) Behavioural change through psychosocial and spiritual / religious support	NGO, MOH, JAKIM, Interfaith organisations	Number of clients referred	To include family support component for FSW
2.3.4	Risk Elimination through Job Rehabilitation			
	a) Provide training and job replacement opportunities	CSO/MAC, MWFCD, JPN, Majlis Agama Islam (MAIN), GIAT MARA, Amanah Ikhtiar Malaysia, MOHR, MOA etc.	Frequency: 1 session/quarter	
2.4	Mitigating Sexual Transmission among Transgender Women (TGW)			

[7] Education focused on positive behaviour change combined with condom use negotiation skills.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
2.4.1	**Upscaling of HIV / STI Testing uptake and ensuring linkage to care and treatment**			
	a) Community mobilization - Expand the current TGW networks - Expand CBT	CSO/MAC MOH	a) Number of TGW CSO established per state b) Number TGW tested for HIV and know status – 80% (2020), 90% (2025), 95% (2030)	
	b) Improve linkages to care and treatment - Case Management approach - Community friendly services - Sensitization & eliminate stigma among health care providers - Capacity building – HIV/STI prevention, treatment cascade, ART and drug use, HRT, social support etc.	MOH, CSO/MAC	a) Number of TGW receiving ART - 80% (2020), 90% (2025), 95% (2030) b) Number of TGW with viral suppression - 80% (2020), 90% (2025), 95% (2030) c) Number of training sessions	
	c) Improve service delivery and treatment compliance - 'Buddy' system (Treatment buddy) within TGW-specific PLHIV support group - Drop-in centers for TGW	NGO, MOH, MWFCD	a) Number of community-friendly clinics established b) Number of Drop-in Centers established	
2.4.2	**Upscale awareness and behaviour change communication**			
	a) Condom marketing - Increase coverage of existing prevention program - Expansion of outreach activities - Condom negotiation skills	MOH, NGO	90% Condom usage with most recent partners	TGW are less likely to use condoms with their regular partners (unlike with customers)
	b) Training and capacity building - Peer educators among TGW - Interactive education materials (social media) - TGW health-related issues e.g. HRT, SRH, STI - Platform for advocacy	MOH, NGO MWFCD (LPPKN)	a) Number of Peer educators trained per state b) 80% TGW achieved HIV awareness level	Linkages with FHRAM clinic

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
2.4.3	**Development of supportive systems**			
	a) Address non-injecting substance abuse - Awareness program on substance abuse - Referral to relevant agencies	MOH, NGO, NADA	60% who need substances abuse referred to the relevant agency	
	b) Psychosocial support - Job substitution & income generation, skills training and career related training - Legal Aid Sessions - to increase awareness of legal aids** - Family Reconciliation - Engage communities at local level to raise awareness and encourage acceptance of TGW to overcome rejection of TGW by their families - Expand Program 'Mukhayyam'	CSO/MAC, JAKIM, MWFCD, SUKAGUAM, Yayasan Bantuan Guaman Kebangsaan, Community Leaders, MAGIC/ JOBSTREET, MOHR	a) At least 2 legal Aid sessions per state per year b) Advocacy meeting with JAKIM c) Min 1 CBO support group per state through existing group MyIsean network.	
2.5	**Prevention of HIV Transmission and Care Among Children, Adolescent & Young People**			
2.5.1	**Scale-up HIV awareness in young people**			
	a) Capacity building among teachers - Comprehensive SRH module (age-specific) - Pocket information on SRH for teachers - Prostar (or alike) reactivation or implementation	MOH, MOE	a) Training module developed in 2019 b) 2 training for teachers conducted / year c) 70% of schools in the states trained	a) Suggest a dedicated unit in MOE (Bhg. Pengurusan Sekolah Harian) as focal point b) Age specific module - primary, secondary, tertiary
	b) Strengthen HIV awareness in school - Weekly School Program/ Social Ethics Program (Etika Pergaulan) – reading health education material during school assembly - On-going weekly school program: "Mesej 5 minit" to include HIV prevention messages	MOH, MOE	a) 100% school implementing the programme – 4 times/year HIV education topics b) 100% schools received standard education materials from MOH	

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	c) HIV/STIs awareness in IPTA/S - sexual education programme in Orientation programme	MOE, MOH	a) Level of awareness among students >80%	
	d) Innovative and interactive reach-out to young population - Social media campaign to younger online users & developing social network among users - Multimedia campaign to reach out children[4] on HIV messages - Interactive game/awareness message in school to increase interest in HIV awareness	KBS, MAMPU, MOH (HECC), CSO/MAC, MOE, KKMM	a) One apps / one webpage created, updated and maintain on monthly basis, with target of 20% of the young population in Malaysia b) HIV slot for popular TV programme c) One interactive game developed d) Adequate knowledge >80% among young people (online survey) e) TV programme reality show / prime time show to take on HIV theme as part of the awareness campaign	a) Number of articles per year: 2 articles per year by Unit HIV/STI, JKN- post in FB/website JKN state. If posting done in FB- to tag HECC FB (Portal MyHealth) and MAC FB (Malaysian AIDS Council) b) Example of popular cartoon with high airtime – Upin & Ipin c) Snake & ladder game during school health festival/ Young Doctor's Club (pilot)
2.5.2	**Rehabilitation & care of young people with drug use behaviour**			
	a) Facilitate and support existing programme on managing drug use issue in secondary school	MOH, MOE, NADA	Collaboration of MoH with MOE & NADA for the HIV Prevention programme – 2x/year	Existing DARIH/SHIELD programme: - DARIH: Dadah (Drug), Alkohol (alcohol), Rokok (cigarette), Inhalant, HIV - SHIELD (Sayangi Hidup Elak Derita Selamanya) Implementation: Funds from NADA. Programme implemented at the district level based on urine tests at schools.
2.5.3	**Provide safe space for young MSM/TGW/SW (Male & Female) to discuss about health behaviours and HIV**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Training for school counsellors in HIV/STIs & Sexuality	MOH, MOE	a) 1 National TOT organized in 2019 b) Echo training at state level – JKN or PKD (minimum one or two a year)	
	b) Strengthening current HIV awareness program in secondary school (delivery and monitoring)	MOE, MOH (HECC)	>80% students have adequate knowledge on HIV	
	c) Support group for young KPs to discuss about Sexual Reproductive Health (SRH) - Create close group on social media	MOH, MOE, MAC	1 online support group established	
2.5.4	**Provide treatment support to Adolescent Living with HIV (ALHIV) and Young PLHIV**			
	a) Improve treatment adherence among Adolescent Living with HIV (ALHIV) and Young PLHIV (YPLHIV) with support group[6]	MOH, CSO/MAC	1 adolescent support group/ state	
	b) Enhancing paramedic adolescent counsellors' skill on treatment adherence for ALHIV/YPLHIV	MOH	Counseling module reviewed to include ALHIV and YPLHIV in 2019/2020	To enhance counselling module to include adolescent counselling
2.5.6	**Access to HIV & STI testing for young key populations**			
	a) Increase uptake of HIV testing among young people (key populations) through adolescent friendly service	CSO/MAC, MOH	At least 1 CBT screening site and government health clinic – for young people	
	b) Review HIV/STI testing barrier for adolescent	MOH		Community feedback reflects needs to have doctor test minor on HIV/STI
2.6	**Task Force for HIV, Drug & Reproductive Health**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
2.6.1	**Increase testing among women of reproductive age**			
	High Risk Group a) Contact tracing / partner referral of NSEP/MMT clients including prisoners b) CBT (e.g.: home visit for screening)	CSO/MAC MOH	a) Number of partners of MMT clients tested for HIV – 80% (2019), 90% (2020), 95% (2021) b) Number of partners of NSEP clients tested for HIV - 50% (2019), 60% (2020), 70% (2021)	All reproductive age group women should know their status
	Low Risk Group a) Review pre-marital course/module every 5 years and enhance HIV/STI messages – early detection, adherence to treatment b) Promote pre-marital HIV testing among non-Muslim couple	MOH, JAKIM, Islamic Religious Dept., Registration Dept,	a) Module reviewed every 5 years b) Number of HIV pre-marital screening	
2.6.2	**Reduce loss to follow up among HIV Positive women at PPHIV clinic**			
	a) Dedicated staffs at clinics (Paramedics with Post-Basic Counselling) to deliver personalised care b) Clinic Peer Support Program at point of care (Klinik Kesihatan)	MOH NGO	<5% defaulter rate	
2.6.3	**Reduce new HIV infections among women**			
	Rapid initiation of ART treatment in all HIV positive partners among sero-discordant couple regardless of CD4 level.	MOH	Number of women on ART 60% (2019), 70% (2020), 80% (2021)	a) Early initiation of ART (regardless of CD4 count) among HIV positive partner in sero-discordant couple is not widely practiced in Malaysia
2.6.5	**Strengthen early booking among pregnant women**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Awareness through pre-marital courses b) Strengthen pre-pregnancy counselling in PLHIV c) Establish "Rakan Ibu Mengandung" support group lead by HIV positive mothers (e.g. CAKNA and PFHDA) d) Strengthening tracing system for defaulters	MOH, JAKIM, CSO/MAC	Number of WLHIV come for early booking (<12 weeks POA) – 80% (2019), 85% (2020), 90% (2021)	
2.6.6	**Strengthen spousal/partners screening**			
	Provision of spouse/partner of antenatal mothers screening as an "opt out"	MOH	Number of spouses/partners tested for HIV - 40% (2019), 50% (2020), 75% (2021)	a) unknown status of husband/Partner b) unknown risk behaviour of husband/partner
2.6.7	**Promote ART adherence among HIV positive pregnant women**			
	a) Establish peer support group "*Rakan Ibu Mengandung*" b) Enhance home visits to check on medication and compliance to treatment. c) Treatment literacy and patient education at point of care by dedicated staff. d) Strengthen HIV MTAC (Medication Therapy Adherence Clinic)	MOH, CSO/MAC	100% of HIV Positive mothers adhere to treatment	Non-compliance often due to: a) lack of knowledge b) no proper counselling c) un-documented d) high risk women
2.6.8	**Expand HIV test among pregnant women at private hospitals and clinics**			
	Standardise PMTCT implementation as national program - Circular and new guideline	MOH, UKAPS Private Practise Practitioners	100% private facilities providing PMTCT	
2.6.9	**Facilitate replacement feeding for HIV-exposed infants**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Lactation suppression therapy given to all mothers with HIV especially with high viral load where breast feeding is not encouraged b) Peer support group for HIV positive mothers c) Strengthen HIV education during antenatal on adherence, options for delivery and infant feeding	MOH, CSO/MAC	Vertical transmission <1%	Lactation suppression therapy not universally practiced in preventing mixed feeding
STRATEGY 3 - REDUCTION OF STIGMA AND DISCRIMINATION				
3.1	Capacity building: a) Development of specific module and training among KPs to overcome self-stigma b) Development of module for effective communication and HIV counselling for HCW c) Service Providers sensitization (HCW and staff of related agency) based on 'Manual Islam and HIV/AIDS'	MOH, NGO, Government agencies, private sectors	a) Module 'Managing Stigma among KP' by 2019 b) Module 'Effective communication & HIV Counselling for HCW' by 2018 c) Training for HCW – 2/state/year d) Training for KPs – 2/year	Workshops on Manual Islam and HIV/AIDS have been conducted by JAKIM since 2009 to Imams, Bilals, officers at the State Religious Departments and community leaders.
STRATEGY 4 - ENSURING QUALITY STRATEGIC INFORMATION AND ITS USE BY POLICY MAKERS AND PLANNERS THROUGH MONITORING, EVALUATION AND RESEARCH.				
4.1	Develop and strengthen M&E framework for all HIV responses - Review and standardisation of the M&E framework - Develop My MMT database - Critical need to upgrade the NAR to include patient monitoring	MOH, NGO, government agencies	a) One M&E framework for all key players – MOH, NGO & government agencies in line with Global AIDS Monitoring (GAM) b) Patient monitoring component added in NAR in 2019	
4.2	Conduct timely and high-quality surveys including behavioural study (IBBS), population size estimations, stigma and other studies.	MOH, CSO/MAC, Academia	Structured study carried out: a) IBBS – 2-3 yearly; next in 2020 b) Stigma among KPs, HCW & community – 2-3 yearly; next 2020 c) Pop. Size estimate for KPs once every 2-3 years; next 2020	a) 3 cycles of IBBS conducted – 2009, 2012 & 2014 b) Stigma assessment among KPs has been incorporated as part of IBBS since 2014 c) Stigma assessment among HCW and community has taken place since 2014

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
4.3	Promote the production, dissemination and effective use of strategic information to inform and guide programme and policy decision making.	MOH, CSO/MAC, bilateral and other government agencies	GAM report (incorporate IBBS and Stigma findings from study) produced and disseminated annually	GAM is a collaborative work involving key stakeholders – MOH, NGO, bilateral and other government agencies
4.4	Sustain and strengthen data collection mechanism from both private and public health facilities.	MOH, GPs	Standard M&E format for PMTCT, STI and MMT for both MOH and GPs	Reporting of PMTCT, STI and MMT are currently on-going.
4.5	Coordinate NSPEA evaluation through systematic data collection and review (MTR)	MOH, CSO/MAC, Bilateral and government agencies	Review of NSPEA indicators yearly MTR every 2 years	

Annex 3: Indicators for monitoring NSPEA 2016-2030

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
1.1	Percentage of eligible adult and children receiving ART	Annually	M&E	MOH							
	Numerator:	(GARPR)			21%	28%	39%	45%	55%	60%	95%
	Number of adults and children currently receiving ART in accordance with the nationally approved treatment protocol (or WHO standards) at the end of the reporting period.				21654	25700	35955	39018	47067		
	Denominator:										
	Estimated number of adults and children living with HIV				100756	92895	93089	87122	86142		
1.2	(a) Percentage of PWID receiving ART	2 yearly	IBBS	MOH							
	Numerator:				29.1%			34.6%	82.2%		95%
	Number of PWID currently receiving ART							66	37		
	Denominator:										
	Number of PWID living with HIV included in the sample							191	45		
	(b) Percentage of TGW receiving ART	2 yearly	IBBS	MOH							
	Numerator:				45.7%			82.5%	100%	100%	100%
	Number of TGW currently receiving ART							33	19		
1.2	Denominator:										
	Number of TGW living with HIV included in the sample							40	19		
	(c) Percentage of MSM receiving ART	2 yearly	IBBS	MOH							
	Numerator:				14.9%			62.6%	91.1%	91.1%	95%
	Number of MSM currently receiving ART							92	82		
	Denominator:										

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
	Number of MSM living with HIV included in the sample							147	90		
	(d) Percentage of FSW receiving ART	2 yearly	IBBS	MOH							
	Numerator:				16.1%			9.3%	87.5%	88.4%	95%
	Number of FSW currently receiving ART							9	7		
	Denominator:										
	Number of FSW living with HIV included in the sample							97	8		
1.3	Percentage of PLHIV with late diagnosis (first CD4 cell count <200 cells/µL)	Annually	M&E	MOH							
	Numerator:	(GARPR)			53%	42%	45%	36%	47%		0%
	Number of PLHIV with late diagnosis in reporting year				492	1567	1554	7381	1301		
	Denominator:										
	Total number of PLHIV with first CD4 cell count in reporting year				927	3689	3484	20485	2775		
1.4	Percentage of PLHIV known to be on treatment 12 months after initiation of ARV	Annually	M&E	MOH							
	Numerator:	(GARPR)			89%	95%	95%	84%	96%	96%	95%
	Number of adults and children who are still alive and on ART at 12 months after initiating treatment.				2685	2301	4679	8643	4816		
	Denominator:										
	Total number of adults and children who initiated ART who were expected to achieve 12-month outcomes within the reporting period, including those who have died since starting ART, those who have stopped ART, and those recorded as lost to follow-up at month 12.				3018	2415	4901	10255	5013		

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
1.5	Percentage of people on ART tested for viral load (VL) with undetectable viral load in the reporting period	Annually	M&E	MOH							
	Numerator:	(GARPR)			85%	85%	94%	95%	87%	88%	95%
	Number of people on ART tested for viral load in the reporting period with undetectable viral load (i.e. ≤ 1000 copies)				2053	20071	27038	3626	29463		
	Denominator:										
	Number of people on ART tested after 12 months therapy for VL during the reporting period				2415	23648	28764	3814	33742		
1.6	(a) Percentage of PWID that have received an HIV test and knew their results	2 yearly	IBBS	MOH							
	Numerator:	(GARPR)			38%			86.8%	93.3%	93.5%	95%
	Number of PWID respondents who have been tested for HV and who know their results				546			1226	769		
1.6	Denominator:										
	Number of PWID included in the sample				1444			1413	824		
	(b) Percentage of MSM that have received an HIV test and knew their results	2 yearly	IBBS	MOH							
	Numerator:	(GARPR)			55%			67.7%	87.5%	88.4%	95%
	Number of MSM respondents who have been tested for HV and who know their results							462	916		
	Denominator:										
	Number of MSM included in the sample							682	1047		
	(c) Percentage of TGW that have received an HIV test and knew their results	2 yearly	IBBS	MOH							

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
	Numerator:	(GARPR)			67%			43.0%	83.7%	85.2%	95%
	Number of TGW respondents who have been tested for HV and who know their results							382	438		
	Denominator:										
	Number of TGW included in the sample							889	523		
	(d) Percentage of FSW that have received an HIV test and knew their results	2 yearly	IBBS	MOH							
	Numerator:	(GARPR)			62%			35.1%	60.2%	64.6%	95%
	Number of FSW respondents who have been tested for HV and who know their results							221	291		
	Denominator:										
	Number of FSW included in the sample							630	483		
1.7	Percentage of women and men aged 15+ who are HIV+ in the last 12 months	Annually	M&E	MOH							
	Numerator:	(GARPR)			0.13%	0.09%	0.12%	0.11%	0.21%	0.19%	0.04%
	Number of women and men 15+ who are HIV+ out of number tested				1853	1502	1941	1716	3719		
	Denominator:										
	Number of women and men aged 15+ who received HIV test and know the result				1446133	1609273	1649156	1565819	1807386		
1.8	Percentage of estimated HIV-positive incident TB cases that received treatment for TB and HIV	Annually	M&E	MOH							
	Numerator:	(GARPR)			19.7%		30%	60%			95%

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
	Number of people with HIV infection who received ARV combination therapy in accordance with the nationally approved treatment protocol (or WHO/UNAIDS standards) and who were started on TB treatment (in accordance with the national TB programme guidelines) within the reporting year				453	574	437	949	346		
	Denominator:										
	Estimated number of incident TB cases in people living with HIV										
1.9	Percentage of adults and children living with HIV newly enrolled in care who are detected having active TB disease	Annually	M&E	MOH							
	Numerator:	(GARPR)			9.5%	9%	6%	5%	10%	9%	5%
	Total number of adults and children newly enrolled in HIV care who are diagnosed as having active TB disease during the reporting period				453	649	471	183	386		
1.9	Denominator:										
	Total number of adults and children newly enrolled in pre-ART care or on ART during the reporting period				4790	7221	8319	3347	3839		
1.10	Percentage of adult and children newly enrolled in HIV care starting isoniazid preventive therapy (IPT)	Annually	M&E	MOH							
	Numerator:	(GARPR)			43.1%	71%	69%	79%	17%	27%	95%
	Number of adults and children newly enrolled in HIV care (pre-ART & ART) who also start (given at least one dose) IPT during the reporting period				2063	5523	5740	2636	670		
	Numerator:										
	Number of adults and children newly enrolled in HIV care during the reporting period				4790	7825	8319	3347	3839		

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
1.11	Percentage (%) of adults and children enrolled in HIV care who had TB status assessed and recorded during last visit	Annually	M&E	MOH							
	Numerator:	(GARPR)				77%	83%	84%	70%	73%	95%
	Number of adults and children newly enrolled in HIV care (pre-ART & ART) who also start (given at least one dose) IPT during the reporting period					2559	2806	2827	2702		
	Numerator:										
	Number of adults and children newly enrolled in HIV care during the reporting period					3330	3397	3347	3839		
OUTPUT INDICATORS											
1.12	Number of facilities providing HIV screening/testing services	Annually	M&E	MOH							
	Numerator:	(GARPR)		NGO							
	(a) Government health facilities				1187	1195	1195		1280		1180
	(b) Private health facilities				7035				8419		7035
	(c) NGO/CBO screening points				5		10	15			25
1.13	(a) Percentage of PWID reached that have received an HIV screening	Quarterly	M&E	NGO							
	Numerator:					9%	17%	32%	180%		
	Number of PWID client who have been screened for HIV					3106	5014	6933	6543		
	Denominator:										
	Number of active PWID (≥9 times face-to-face outreach) client in the last 12 months					33162	29303	21717	3641		

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
	(b) Percentage of SW reached that have received an HIV screening	Quarterly	M&E	NGO							
	Numerator:					22%	29%	124%			95%
	Number of active SW client who have been screened for HIV					299	342	634	2914		
	Denominator:										
	Number of active SW (≥6 times face-to-face outreach) client in the last 12 months					1337	1182	511	618		
	(c) Percentage of MSM reached that have received an HIV screening	Quarterly	M&E	NGO							
1.13	Numerator:					56%	44%	37%			95%
	Number of active MSM client who have been screened for HIV					263	359	444	14431		
	Denominator:										
	Number of registered active MSM client in the last 12 months (>=4 times face-to-face outreach)					469	824	1198	2277		
1.14	Treatment adherence peer support (TAPS) programme	Annually	M&E	NGO							
	Numerator:										
	Number of HIV treatment centers with TAPs programme										
	a) Hospital				23	22	23	21	1		
	b) Health Clinic				5	5	14	13	0		
1.15	Capacity building of outreach / case worker on Harm Reduction, HIV screening, TB detection and linkages to care	Annually	M&E	NGO							
	Numerator:			MOH							
	(a) Appropriate module developed					1	1				

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
	(b) Number of outreach worker or case worker trained				0		60	18	174		
OUTPUT INDICATORS											
2.1	Percentage of PWID reported never share needle in the last 12 months	2 yearly	IBBS	MOH							
	Numerator:	(GARPR)			76%			79.7%	90.4%	91.0%	95%
	Number of PWID respondents who have never share needle in the last 12 months							1126	745		
	Denominator:										
	Number of PWID included in the sample							1413	824		
2.2	Percentage of PWID who report the use of a condom at last sexual intercourse	2 yearly	IBBS	MOH							
	Numerator:	(GARPR)			20.8%			25.7%	10.0%	18.8%	80%
	Number of PWID who reported that a condom was used the last time they had sex							311	21		
	Denominator:										
	Number of PWID who report having injected drugs and having sexual intercourse in the last month.							1212	210		
2.3	Percentage of PWID shifted from NSEP to OST	Annually	M&E	MAC							
	Numerator:				21%	6%	7%	15%	12%	20%	80%
	Number of active NSEP client who have been referred to OST service					1937	2117	3214	602		
	Denominator:										
	Number of registered active opiate NSEP clients					33162	29303	21717	5,152		
2.4	Percentage of PWID living with HIV	2 yearly	IBBS	MOH							

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
	Numerator:	(GARPR)			16.30%			13.4%	7.5%	7.2%	<5%
	Number of PWID who test positive for HIV							190	62		
	Denominator:										
	Number of PWID tested for HIV							1413	824		
2.5	Percentage of Hepatitis C infection among PWID	Annual	M&E	MOH							
	Numerator:				28%	17.7%	26.0%	18.6%	30.4%	28.5%	15%
	Number of PWID infected with Hepatitis C	Dr Fazidah				978	1034	766	1531		
	Denominator:										
	Number of new PWID enrolled in OST in the current year					5529	3974	4125	5038		
2.6	Percentage of PWID on OST	Annual	M&E	MOH							
	Numerator:				30%	50.4%	55.9%	82.9%	90.9%	90.2%	85%
	Number of registered OST clients					85626	94945	99481	68192		
	Denominator:										
	Number of estimated opiate PWID					170000	170000	120000	75000		
2.7	Percentage of PWID reached with prevention programmes	2 yearly	IBBS	MOH							
	Numerator:	(GARPR)			65%			72.3%	91.0%	90.9%	90%
	Number of PWID reached							1021	750		
	Denominator:										
	Number of PWID included in the survey							1413	824		
2.8	Needles distributed to each PWID in the last 12 month	Annually	M&E	MAC	285			562			300
	Numerator:	(GARPR)				634/pax	340/pax	562/pax			
	Number of sterile needles distributed in the past 12 months				5262531	9871636	4467932	3267033	652701		
	Denominator:										
	Number of active PWID client					15579	13156	5816	3641		
2.9	Number of substitution therapy (OST) sites	Annually (GARPR)	M&E	MOH	838	857	907	889	733		
	(a) Government				472	482	506	520	499		

No.	Indicator	Data Collection Frequency	Data Collection Method	Org.	2014	2015	2016	2017	2022	2023	Target 2030
	(b) Private (GP)				366	375	401	369	234		
2.10	OST retention	Yearly	M&E	MOH	NA						
	Numerator:					63.4%	64.9%	62.2%	32.9%	39.4%	85%
	Number of OST clients still in treatment 6 months after starting MMT.					20536	21876	21541	18901		
	Denominator:										
	Number of clients started on OST					32383	33716	34644	57514		
2.11	Percentage of PWID reached with minimum prevention programme	Annually	M&E	NGO							
	Numerator:				24%	89%	92%	95%	15%	25%	90%
	Number of PWID reached					29422	27102	20685	11406		
	Denominator:										
	Estimated number of PWID					33162	29303	21717	75000		

Annex 4: National Plan Of Action For STIs 2024-2030

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
STRATEGY 1: ADVOCACY, COMMUNICATION AND SOCIAL MOBILIZATION				
1.1	Increase awareness of STIs and their symptoms, and encourage seeking early treatment			
	a) Develop national and state campaigns that provide clear, factual information about STIs, their symptoms, and the potential consequences of untreated infections.	MOH, MOE, MOHE, MAF/MAC, NGOs	- No. of national and state campaigns in the reporting year	- Partner with influencers, local community leaders, and celebrities to amplify messages and discussions about sexual health.
	b) Use diverse media platforms (television, radio, social media, and print) to reach different demographics, including youth, at-risk populations, and rural communities.	MOH, Prasarana, Public Spaces, CSR with private companies.	- No. of digital displays on STI awareness in public and community settings (health clinics, cinemas, LRT/MRT stations) in the reporting year.	- Partner with CSR initiatives for funding
	c) Establish outreach programs targeting key populations such as sex workers, men who have sex with men (MSM), and young people, who may have limited access to information or healthcare.	CSO/MAF/MAC	- No.of outreach programs targeting KPs	- Implementing partners to increase outreach programs to KPs
1.2	Health education activities in healthcare, community, and other settings to normalize the dialogue about sexual health.			
	a) Organize workshops, seminars, and discussions in healthcare settings, schools, workplaces, and community centres to promote sexual health education.	MOH, MOE, MOHE	Conduct Comprehensive Sexual Health Education Training for Teachers (using PROSTAR/PEERS/ GenTHA module) - At least 1 training/session/state/year, with 30-50 teachers/session trained.	- Focus on STI prevention, reproductive health, and counselling.
	b) Train healthcare providers to initiate open, non-judgmental conversations about sexual health with patients and offer resources for STI prevention and treatment.	MOH, NGOs, KBS, JAKOA, LPPKN, KPWKM	Conduct sessions for CHW focusing on SRH education, HIV/STI prevention and early detection - At least 1 training/session/state/year, with 30- 50 HCW/session trained annually.	- Foster an environment where talking about sexual health, including STIs, becomes a routine and accepted practice in all areas of life.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	c) Encourage peer education programs where community members, particularly youth and vulnerable groups, can learn from and support each other.	MOH, NGOs, KBS, LPPKN, KPWKM, MOE, MOHE, JAKOA	**Conduct sessions in underserved communities focusing on SRH education, HIV/STI prevention and early detection** - **At least 1 training/session/state/year, with 30- 50 youths/session trained annually.**	- Focus on STI prevention, reproductive health, and counselling.
	d) Collaboration between MOH and MOHE through PROSTAR program and KAMI (Kelab Kesihatan Anak Muda IPTA/IPTS)	MOH, MOHE, MAKESUM, MAF/MAC, etc	**Conduct sessions for peer educators. piloted in IPTA/IPTSs.** - At least 1 IPTA/IPTS	
1.3	**Information and age-appropriate education campaigns**			
	a) Provide tailored, accurate, and age-appropriate information on sexual health and STI prevention for different age groups.	MOH, KBS, LPPKN, KPWKM, MOE, MOHE, JAKOA	- No. of educational materials specifically designed for adolescents, young adults, and older populations, using language and formats that resonate with each group.	Age-appropriate information on sexual health and STI prevention for different age groups.
	b) Integrate STI education into school curriculums, starting at appropriate age levels, to build knowledge early and promote healthy behaviours.	MOH, MOE	- Implementation of Sexual Reproductive Health education at school using PEERS /PROSTAR module	
1.4	**Address stigma and discrimination**			
	d) Launch campaigns to challenge myths and misconceptions about STIs, highlighting that anyone can be affected and that treatment is available.	MOH, MAF/MAC, IPs	- At least 1 annual campaign event like STI Awareness Week (2nd week of April) or during World Sexual Health Day (10th July)	Recommendation as an annual activity Content creation competition on STIs, Re-emphasize HIV and STI in the Sexual Reproductive Health Education for Youth
	e) Promote messages of inclusivity and empathy, emphasizing that seeking STI care is an important part of maintaining overall health and well-being.	MOH, MAC/MAF, IPs	- Continuous messages emphasizing that seeking STI care is an important part of maintaining overall health and well-being.	
1.5	**Introduce various methods for self-care strategies, self-collection of specimens, teleconferencing, and online appointments to reduce barriers to accessing STI services**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Promotion of the existing program i.e HIV Self-testing via TESTNOW, PrEP, condom etc	MOH, MAF/MAC, IPs	- No. of Testnow websites visited - No. of clients request for HIVST kits - Percentage of clients who completed the risk assessment - Percentage of clients who tested HIV positive - Percentage of clients who seek help for STI services appointment (ex. STI treatment or PrEP)	Track distribution of HIVST kits and condoms at NGOs.
	b) Promote the use of teleconference/telemedicine platforms on MySejahtera; HIV/STI Screening, treatment, PrEP etc. or other virtual platforms.	MOH, GPs MASHM, MAF/MAC, IPs	- Streamline online appointment scheduling to facilitate easy access to STI care and reduce waiting times, making it more convenient for individuals to seek treatment - Implementation of the MySejahtera telemedicine platform across all STICFCs.	Monitor sexual health appointment numbers via MyVAS.
STRATEGY 2 - QUALITY AND COVERAGE OF PREVENTION PROGRAMMES				
2.1	Strengthening screening activities for STIs among key populations (KPs)			
	a) Focus on high-risk groups such as sex workers, men who have sex with men (MSM), people who inject drugs (PWID), and transgender individuals, providing regular and accessible STI screenings in areas where they are concentrated	MOH, MAC/MAF, IPs	- Percentage of key population (WAR, MSM, TG) screened for syphilis. - Percentage of key population (WAR, MSM, TG) screened for gonorrhoea. - Percentage of WAR screened for cervical cancer	- Engagement with the owners of high-risk premises/ ungazetted areas for awareness about STIs
	b) Implement mobile health clinics and community-based screening events that offer confidential STI testing in locations where key populations are most likely to seek care, such as drop-in centres or shelters.	MOH, MAC/MAF, IPs		- Increase CBT for STIs during outreach
	c) Partner with NGOs and community-based organizations that work with key populations to encourage testing and facilitate the integration of	MOH, MAC/MAF, IPs		- Integrate STI screening with other services such as blood pressure (BP) and random blood sugar (RBS) checks.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	STI screening into other health services such as NCD testing, HIV testing or harm reduction programs.			
2.2	**Strengthening screening activities for STIs among vulnerable populations, especially sexual partners, people on PrEP, Orang Asli, Bumiputra Sabah and Sarawak**			
	a) Strengthen syphilis screening for antenatal mothers to prevent congenital infections.	MOH, GPs, CSO/MAC/MAF	- Ensure that syphilis screening is integrated into routine prenatal care across both public and private healthcare settings.	- Strengthen syphilis screening, treatment and care
	b) To increase uptake of syphilis screening among antenatal mothers at 28 weeks gestation.	MOH, GPs, CSO/MAC/MAF	- No. antenatal mothers screen for syphilis at 28 weeks gestation.	
	c) Encourage the screening of sexual partners of individuals diagnosed with an STI, including those on PrEP (Pre-Exposure Prophylaxis) for HIV, to reduce the risk of reinfection and further transmission.	MOH, GPs, CSO/MAC/MAF	- 100% sexual partner/s to syphilis, chlamydia and gonorrhea-positive antenatal mothers are epidemiologically treated.	
	d) Conduct targeted outreach and culturally appropriate screening programs for marginalized populations such as Orang Asli and Bumiputra communities in Sabah and Sarawak, who may have limited access to healthcare.	MOH, JAKOA, Bumiputra communities in Sabah and Sarawak	- No. of STIs among marginalized populations such as Orang Asli and Bumiputra communities in Sabah and Sarawak in the reporting year	- To link STI services with MCH, leprosy and TB screening programs
2.3	**Strengthening screening activities for STIs among adolescents**			
	a) To collaborate with the Adolescent Health Sector, MOH on the effort to review the Age of Majority Act and guidelines on the management of adolescents' sexual and reproductive health. b) Engagement with stakeholders of adolescent programs i.e, MOE, MOHE, KBS, KPKT, Local leaders etc	MOH, MOE, MOHE, KBS, KPKT, Local leaders etc	- No. of STI screening conducted disaggregated by age (below 18 and 18 to 24) at the primary health clinics. - No. of adolescents below 18 years old seeking HIV and STI services at Community-based testing by NGO - Establishment of law reform related to the Age of Majority Act at 16 years of age.	- To link the Adolescents Health Clinic with STICFCs

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
2.4	**Strengthening screening activities for STIs among the general population, especially blood donors to ensure blood safety and reduce transfusion-transmissible infections**			
	a) Ensure that all blood donors undergo comprehensive screening for STIs, including syphilis, HIV, and hepatitis B and C, as part of routine blood safety protocols	National Blood Centre, Bahagian Perkembangan Perubatan	- 100% of donated blood samples screened with NAAT (HIV, Hep B, Hep C) and serology (HIV, Hep B, Hep C, Syphilis)	- To ensure blood safety and reduce transfusion-transmissible infections
	b) Incorporate STI screening into broader health initiatives, such as wellness programs or during medical visits for other conditions, making STI testing more routine and accessible for the general population.		- STI screening is incorporated into broader health initiatives,	
	c) Refer all symptomatic STI blood donors		- 100% of symptomatic STI blood donors are referred for further treatment.	
2.5	**Availability of accurate Point-of-Care Tests (POCT)**			
	a) Ensure that point-of-care tests (POCT) for STIs are widely available and utilized for rapid, accurate diagnosis and immediate treatment	MOH, MASHM, GPs, MAF/MAC, IPs	- Introduce POCT in primary health care clinics, to enable rapid testing and immediate diagnosis, particularly for high-prevalence STIs such as syphilis, gonorrhoea, and chlamydia. - Train healthcare providers on the use of POCT, ensuring that they are familiar with the interpretation of results, counselling, and immediate treatment options.	- POCT for Syphilis, CT and NG
2.6	**Availability of newer screening tests for various STIs**			
	a) Introduction of new diagnostics tests such as nucleic acid amplification tests (NAATs), which provide more accurate detection of infections like gonorrhoea, chlamydia, and trichomoniasis.	MOH, MASHM, GPs, MAF/MAC, IPs	- Invest in multiplex tests that can detect multiple STIs from a single sample, thereby increasing efficiency and reducing the burden on patients. - Upgrade laboratory infrastructure to accommodate new testing technologies and ensure that lab personnel are trained	- To improve the accuracy and comprehensiveness of diagnostics.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
			in the use of advanced diagnostic equipment and procedures.	
	b) Out-sourcing of STI tests to an external/private laboratory	MOH, MASHM, GPs, MAF/MAC, IPs	- Partnership with external/private laboratories network.	- In occasions where the laboratory cannot do the advanced STI test and to reduce cost.
	c) Support pilot projects and research initiatives to evaluate the effectiveness of newer screening tests in different settings, including rural areas and populations with limited access to healthcare.	MOH, MASHM, GPs, MAF/MAC, IPs	- At least one pilot project or research initiative to evaluate the effectiveness of newer screening tests	- Approval from NMRR is required
STRATEGY 3 - ACCESS TO DIAGNOSTIC, TREATMENT AND CARE SERVICES				
3.1	**Improve coverage and early access to STI diagnostic tests, treatment, and care at primary care, hospitals, and private sectors**			
	a) Increase the number of facilities offering STI services, particularly in rural or underserved areas.	MOH,	- Scaling up no. of STICFC at district level (at least 1 STICFC per district)	- Strengthen STICFC services at the district level.
	b) Ensure that individuals can easily access STI diagnostic services and treatment across all healthcare settings by enhancing partnerships between government facilities and private sectors.	MOH, Private lab, Private GPs	- STI-friendly GP being trained by KKM. - Private lab to notify/report cases. - Shared information (data collections or M & E) - Joint exhibition or CBO exhibition at GP clinic	- Strengthen collaborations with private healthcare providers to integrate STI testing and treatment into routine healthcare.
3.2	**Regularly update case management guidelines to reflect advances in treatment, diagnostics, and development of resistance to medicines**			
	Ensure that healthcare providers use the most up-to-date information for diagnosing and treating STIs. a) Raise awareness about the latest Malaysian Guidelines on Management of STIs (5th edition, 2023)	MOH (Medical Development Division, Disease Control Division, Dermatology, ID)	- Guidelines on Management of STIs (5th edition is made available and accessible via the MOH website - Guideline to be reviewed every five years	- All State Health Dept, MOE (University Hospitals), MMA (Private Hospitals), Private laboratories, MINDEF
	b) Provide continuous professional education and training to healthcare workers on new protocols.		- National Conference on STIs, once every 3 years	
3.3	**Scale up syndromic management approach in primary healthcare**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	Enhance the ability of primary healthcare providers to manage STIs. a) Train primary care providers to implement the syndromic management approach, which focuses on treating STIs based on symptoms.	MOH (BKP, BPKK)	- All FMS, Mos and paramedics are trained with MSA	- A care model comprising point-of-care testing for STIs, immediate treatment, provider-assisted partner referral and therapy).
	b) Ensure the availability of treatment algorithms and decision-making tools at all primary health clinics.	MOH (BKP, BPKK)	- All primary health clinics have MSA treatment algorithms	
	c) Monitor and evaluate the effectiveness of syndromic management in terms of patient outcomes and rates of STI transmission	MOH (BKP, BPKK)	- Evaluation of the MSA program at the national/state level	
	d) To improve the positivity of N. gonorrhoeae culture	MOH (BKP, BPKK)	- Usage of optimal transport conditions for N. gonorrhoea.	- SOP and guidance from MKAK
	e) To optimize human resources at the primary healthcare laboratory.	MOH (BKP, BPKK)	- Additional one MLT in primary healthcare (STI ClienTt Friendly Clinic, STICFC)	- To cater for the increase in workload and faster turnaround time.
3.4	**Expedite partner treatment and voluntary provider-assisted referral of sexual partners**			
	a) Implement protocols that encourage treated individuals to inform their partners and help facilitate their access to treatment.	MOH, GPs, MAF/MAC, IPs	- To follow the national guidelines on partner referral	- Prevent the reinfection of treated individuals by ensuring that their sexual partners also receive timely treatment.
	b) To empower community health workers (NGO) for sexual contact tracing and referral services, ensuring that privacy and confidentiality are maintained.	MOH, MAF/MAC, IPs	- No. of sexual partner of index case being referred to primary health clinics	
	c) To enhance provider-assisted referral for sexual contacts through the Sexual Health clinic appointments option in the MySejahtera apps/MyVAS	MOH, MAF/MAC, IPs	- Evaluation of Sexual Health clinic appointments in the MySejahtera apps/MyVAS	
3.5	**Ensure availability of medicine and adherence to treatment**			
	a) Strengthen the supply chain management system for STI medications, including antibiotics and antivirals, at public and private healthcare facilities.	MOH (Pharmacy)	- Continuous availability of medications and promote adherence to treatment regimens to prevent complications and the development of drug resistance.	- Currently, Azithromycin is not indicated for M.genatilum in the drug formulary. Alternative antibiotic (cefixime), registered in NPRA but not listed in Malaysian formulary.

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	b) Implement reminder systems	MOH (Pharmacy)	- Implement SMS or app-based reminders to promote adherence to prescribed treatments.	
	c) Offer adherence counselling and support for patients	MOH (Pharmacist, FMS, paramedics etc)	- Implement adherence counselling and support for patients, particularly those at high risk of non-adherence, such as individuals with complex social or economic challenges	
3.6	**Innovate contact tracing**			
	a) Utilize technology, such as mobile apps and electronic health records, to streamline contact tracing efforts.	MOH, MAF/MAC, IPs	- Introduce innovative tools for anonymous notification of potential exposures.	- Partnerships with IPs and community health workers to support contact tracing in marginalized groups.
STRATEGY 4: QUALITY STRATEGIC INFORMATION, MONITORING AND EVALUATION AND RESEARCH				
4.1	**Strengthen STIs notification from primary health clinics, private GPs, government and private hospitals**			
	a) Strengthen STIs notification from primary health clinics, private GPs, government and private hospitals	MOH and private health facilities	- Engagement session (Eg: physical engagement, social media – CME, Webinar) with public and private health sector, 1 or 2 sessions/year - Mandatory requirement for every new private health sector to have an e-notice ID - Strengthen the enforcement of STI notification based on the CDC Act	- Increase collaboration between the Ministry of Health, private healthcare providers, and clinics to ensure seamless reporting and encourage accountability in STI management
4.2	**Develop case investigation forms for STIs that can be used for appropriate public health measures**			
	a) Create standardized forms that allow for comprehensive case investigations, supporting more effective contact tracing, outbreak control, and public health interventions.	MOH and private health facilities	- Develop standardized case investigation forms for STIs that can be used for appropriate public health measures	
4.3	**Develop a monitoring and evaluation framework that complements the NPSTIs (National Plan for STIs) objectives, strategies, and targets set from baseline and ending STIs by 2030**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Establish a robust monitoring and evaluation (M&E) system to track the progress of STI control efforts and assess the effectiveness of interventions.	MOH	- Strengthen STI notification from primary health clinics, private GP, government, and private hospitals to the nearest District Health Office or into e-notification System. - Monthly return from all laboratories (notified positive cases) to District Health Office - MyHCC PMTCT that links to the e-notification system	- Develop dashboards and reporting tools to share real-time progress updates with stakeholders, ensuring transparency and accountability.
4.4	**Promote and support research and partnerships to move towards evidence-based STI response**			
	a) Foster innovation and ensure that STI prevention, diagnosis, and treatment strategies are grounded in the latest scientific evidence.	MOH	- Engage consultant for capacity building and cost-effectiveness study.	- Collaborate with international organizations and researchers to stay updated on global STI trends and best practices, adapting these insights to the Malaysian context.
STRATEGY 5: CAPACITY BUILDING AND ENHANCEMENT.				
5.1	**Strengthen capacity building and knowledge about managing STIs among healthcare providers**			
	a) Equip healthcare providers (doctors, nurses, pharmacists, and allied health workers) with up-to-date knowledge and skills for effective STI diagnosis, treatment, and prevention.	MOH	- Organize training for HCPs using the latest Malaysian STI guidelines. - Incorporate STI into the post-basic modules for paramedics	- Implement hands-on training and mentorship programs for healthcare providers in primary healthcare settings, hospitals, and private clinics, enabling them to practice and refine their skills in STI diagnosis and treatment.
5.2	**Improve knowledge of NGO Community Health Workers (CHWs) on STIs for adequate and correct dissemination of information to the community**			

NO	KEY ACTIVITIES	KEY STAKEHOLDERS	PROGRAMMATIC TARGET	REMARKS / ACTIONS
	a) Enhance the capacity of NGO Community Health Workers (CHWs) to effectively communicate accurate and relevant information about STIs to the community, especially vulnerable and high-risk populations.	MOH, MAF/MAC, CBOs	- Organize training for Community Health Worker (CHW) about STIs, PrEP, Behaviour change counselling	- Equip CHWs with communication and peer education skills, enabling them to have empathetic and non-judgmental conversations about sexual health, addressing stigma, and promoting STI services in a culturally sensitive way.
5.3	**Enhance collaboration and partnership between government clinics/hospitals, private clinics/hospitals, and NGOs**			
	a) Strengthen the partnerships between public and private healthcare sectors and NGOs to improve the coordination of STI services, expand access to care, and share resources and expertise.	MOH, MAF/MAC	- Organize webinar/ workshop on STIs at least once/year at national/state level - Online training package on STIs (private GP/hospitals)	- Organize joint training and capacity-building sessions that bring together healthcare providers from public and private sectors as well as NGO staff, fostering collaboration and improving knowledge sharing across sectors.

Annex 5: Indicators for monitoring National Plan of Action for STIs 2024-2030

No	Indicator	Data Collection Frequency	Data Collection Method	Org.	2024	2025	2026	2027	2028	2029	Mid – Term (2025)	Target 2030
STRATEGY 4. Strategic information, monitoring and evaluation and research												
IMPACT INDICATORS												
4.1	Number of new cases of syphilis among people 15-49 years old per year	Annually	M&E	MOH	2408	2293	1892	1491	1090	689		287
	Numerator:											
	Number of cases with laboratory diagnosed Syphilis in the reporting year											
4.2	Number of new cases of gonorrhoea among people 15-49 years old per year	Annually	M&E	MOH	1918	1826	1507	1187	868	548		228
	Numerator:											
	Number of cases with laboratory diagnosed Gonorrhoea in the reporting year											
4.3	Congenital syphilis cases per 100,000 live births per year	Annually	M&E	MOH	< 50	< 50	< 50	< 50	< 50	< 50		< 50
	Numerator:											
	Number of reported congenital syphilis cases (live births + still births) in the reporting year											
	Denominator:											

No	Indicator	Data Collection Frequency	Data Collection Method	Org.	2024	2025	2026	2027	2028	2029	Mid – Term (2025)	Target 2030
	Number of live births											
4.4	Percentage of girls fully vaccinated with human papillomavirus vaccine by 15 years of age	Annually	M&E	MOH	50	50	60	70	80	90		90
	Numerator:											
	Number of girls fully vaccinated with human papillomavirus vaccine by 15 years of age											
	Denominator:											
COVERAGE INDICATORS												
4.5	Percentage of pregnant women attending antenatal care screened for syphilis	Annually	M&E	MOH	95	95	95	95	95	95		95
	Numerator:											
	Number of women attending antenatal care services who were tested for syphilis											
	Denominator:											
	Number of women attending antenatal care services											
4.6	Percentage of pregnant women attending antenatal care treated if positive for Syphilis	Annually	M&E	MOH	95	95	95	95	95	95		95

No	Indicator	Data Collection Frequency	Data Collection Method	Org.	2024	2025	2026	2027	2028	2029	Mid – Term (2025)	Target 2030
	Numerator:											
	Number of women attending antenatal care services with a positive syphilis test who received at least one dose of benzathine penicillin 2.4 mU intramuscularly											
	Denominator:											
	Number of women attending antenatal care services who tested positive for syphilis											
4.7	Percentage of key population screened for syphilis (FSW, MSM, TG)	Annually	M&E	MOH	> 95	> 95	> 95	> 95	> 95	> 95		> 95
	Numerator:											
	Number of key population (FSW, MSM, TG) screened for syphilis.											
	Denominator:											
	Population size estimate for key population (FSW, MSM, TG)											
4.8	Percentage of key population treated if positive for Syphilis (FSW, MSM, TG)	Annually	M&E	MOH	> 95	> 95	> 95	> 95	> 95	> 95		> 95
	Numerator:											
	Number of key population (FSW, MSM, TG) with a positive syphilis test who received treatment											
	Denominator:											

No	Indicator	Data Collection Frequency	Data Collection Method	Org.	2024	2025	2026	2027	2028	2029	Mid – Term (2025)	Target 2030
	Number of key population (FSW, MSM, TG) tested positive for Syphilis											
4.9	Percentage of key population (FSW, MSM, TG) screened for gonorrhoea	Annually	M&E	MOH	> 95	> 95	> 95	> 95	> 95	> 95		> 95
	Numerator:											
	Number of key population (FSW, MSM, TG) screened for gonorrhoea											
	Denominator:											
	Population size estimate for key population (FSW, MSM, TG)											
5.0	Percentage of key population (FSW, MSM, TG) treated for gonorrhoea if positive.	Annually	M&E	MOH	> 95	> 95	> 95	> 95	> 95	> 95		> 95
	Numerator:											
	Number of key population (FSW, MSM, TG) with a positive gonorrhoea test who received treatment											
	Denominator:											
	Number of key population (FSW, MSM, TG) tested positive for gonorrhoea											
5.1	Percentage of women screened for cervical cancer, by the age of 35 years and again by 45 years											
a.	Numerator:	Annually	M&E	MOH	>40	>50	>60	>70	>70	>70		>70

No	Indicator	Data Collection Frequency	Data Collection Method	Org.	2024	2025	2026	2027	2028	2029	Mid – Term (2025)	Target 2030
b.	*Number of women aged 35 – 45 years old screened for cervical cancer*											
	Denominator:											
	Estimated number of women aged 35 – 45 years old											
	Numerator:	Annually	M&E	MOH	>40	>50	>60	>70	>70	>70		>70
	Number of women aged 35 – 45 years old screened for cervical cancer using a high-performance test											
	Denominator:											
	Estimated number of women aged 35 – 45 years old											

6 References

[1] MOH, "The National Strategic Plan for Ending AIDS 2016-2030," Ministry of Health, Malaysia, Putrajaya, 2015.

[2] UNAIDS, "Fast-track cities: Ending the AIDS epidemic," 1 Dec 2014. [Online]. Available: http://www.unaids.org/en/resources/documents/2014/20141201_Paris_declaration. [Accessed 9 July 2018].

[3] UNAIDS, "90-90-90 An ambitious treatment target to help end the AIDS epidemic," Joint United Nations Programme on HIV/AIDS (UNAIDS), 2014.

[4] MOH, Surat Pekeliling Ketua Pengarah Kesihatan Malaysia, Bil 1/2011: Carta Alir Ujian Saringan dan Pengesahan HIV., Putrajaya: Ministry of Health Malaysia, 2011, p. Lampiran 5.

[5] WHO, "Guidelines for managing advanced HIV disease and rapid initiation of antiretroviral therapy.," World Health Organization, Geneva, 2017.

[6] WHO, "Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations.," World Health Organization, Geneva, 2016.