A rapid assessment of multi-month dispensing of antiretroviral treatment and pre-exposure prophylaxis the Asia-Pacific region

Final Report

August 2020

UNAIDS REGIONAL OFFICE FOR ASIA AND THE PACIFIC

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ACRONYMS

3TC	Lamivudine	**NACO**	National AIDS Control Organisation
ART	Antiretroviral treatment	**NAP**	National AIDS Programme
ARV	Antiretroviral drugs	**NASP**	National AIDS Strategic Plan
AZT	Azidothymidine	**NCHADS**	National Centre for HIV/AIDS, Dermatology and Sexually Transmitted Infections
CAGRs	Community ART Refill Groups	**NGO**	Non-governmental organisation
CBO	Community-based organisation	**NHSO**	National Health Security Office
CDC	U.S. Center for Disease Control	**NVP**	Nevirapine
CHAS	Centre for HIV/AIDS and Sexually transmitted infection	**OHAT**	Out-patient HIV/AIDS treatment package
CSC	Care and Support Centre	**OI**	Opportunistic infection
CSO	Civil Society Organisation	**PEPFAR**	President's Emergency Plan for AIDS Relief
DSD	Differentiated service delivery	**PLHIV**	People living with HIV
EFV	Nevirapine and Efavirenz	**PrEP**	Pre-exposure prophylaxis
FTC	Emtricitabine	**S&D**	Stigma and discrimination
GPO	Government Pharmaceutical Organization	**SACS**	State AIDS Control Societies
HIV	Human immunodeficiency virus	**SOPs**	Standard Operating Procedures
IAS	International AIDS Society	**STI**	Sexually transmitted infection
IHRI	Institute for HIV Research and Innovation	**TDF**	Tenofovir disoproxil fumarate
KP	Key populations	**TLE**	Tenofovir+Lamivudine+Efavirenz
KPLHS	Key population-led Health Services	**TNP+**	Thai Network of People Living with HIV
LAC	Linked Antiretroviral Treatment (ART) Centre	**TRCARC**	Thai Red Cross AIDS Research Centre
LTFU	Loss to follow up	**UHC**	Universal Health Coverage
M&E	Monitoring and evaluation	**UNAIDS**	Joint United Nations Programme on HIV/AIDS
MMD	Multi-month dispensing	**USAID**	United States Agency for International Development
MMS	Multi-month scripting	**VAAC**	Vietnam Authority of HIV/AIDS Control
MOH	Ministry of Health	**VL**	Viral load
MOPH	Ministry of Public Health	**WHO**	World Health Organisation

EXECUTIVE SUMMARY

1. Purpose

The purpose of this rapid assessment[1] is to investigate the current status of multi-month dispensing (MMD) in 14 countries in the Asia-Pacific region of UNAIDS - Bangladesh, Cambodia, China, Fiji, India, Indonesia, Laos, Myanmar, Nepal, Pakistan, Philippines, Papua New Guinea, Thailand and Vietnam. It aims to determine the current stages of MMD implementation, identify good practices, factors enabling successful MMD implementation as well as barriers and bottlenecks. It will also investigate MMD with regard to pre-exposure prophylaxis (PrEP) in the two countries where PrEP programming is currently being implemented (Thailand and Vietnam).

2. Background

MMD is a modality of service delivery that aims to improve treatment retention and adherence support among people living with HIV (PLHIV) as part of the differentiated service delivery (DSD) strategy. The World Health Organisation (WHO) recommends that PLHIV who are stable on antiretroviral therapy (ART) be given medication refills of up to 3-6 months in order to minimize their trips to the health facilities/hospitals and ensure continuity of treatment (WHO, 2016). MMD can improve the standard of care by ensuring that resources are focused on the needs of the individual patient for treatment services when and where they are actually needed in conjunction with the preferences of the patient.

DSD embodies the core principle of client-centred care. This entails meeting the diverse needs of PLHIV and enabling them to manage their health with the support of the health system and the community, including PLHIV. It follows that a one-size-fits-all approach does not serve that purpose. MMD therefore may not suit the needs and preferences of all eligible patients. While the system for MMD needs to be scaled up potentially to include all eligible patients, there needs to be recognition of the importance of maintaining some flexibility in decision making to optimise treatment outcomes.

During the global pandemic of COVID-19, it has become increasingly critical to ensure PLHIV have stable access to ART through MMD and also avoid crowding at health facilities. This will require that countries have a robust ART management, effective service delivery approaches, supply chain management and appropriate monitoring strategies. How countries have responded to COVID-19 in terms of implementing MMD is included in this assessment.

3. Methods

The rapid assessment of MMD status in 14 countries in the Asia and Pacific region involved the use of internet searches for published and unpublished documents using keywords related to MMD of ART/PrEP policies and practices, supplemented by documents sourced by UNAIDS Country Offices and key informant interviews. A conceptual framework was developed for data gathering and analysis. Rapid assessment using the conceptual framework to obtain a standard approach were carried out for all 14 countries and these are set out in Section 3 of this report.

4. Key findings

[1] Consultancy carried out by Ravipa Vannakit

4.1 Policy: Countries in the Asia-Pacific region are at different stages in taking forward the recommendations on MMD provided by WHO and International AIDS Society (WHO, 2016: IAS, 2016, 2018) and using them to develop national policy/strategy, clinical/treatment guidelines and operational guidelines.

There is some variation in conceptualization. Some countries have integrated MMD as part of the DSD approach to HIV service delivery: Cambodia, Lao PDR, Myanmar, Papua New Guinea and Thailand. The majority of available national statements on MMD are contained in national treatment guidelines – Bangladesh, Cambodia, India, Lao PDR, Myanmar, Papua New Guinea, Thailand and Vietnam. These recommend 3-month or up to 3-month MMD (Bangladesh, India and Vietnam) or 3-6 month MMD (Lao PDR, Myanmar, Papua New Guinea and Thailand. Cambodia is the only country found in this assessment to have developed budgets for scaling up MMD.

HIV treatment guidelines obtained are largely focused on supply side implementation of MMD. Less attention appears to have been given to demand side activities with ARV prescribers, community, PLHIV and their families to increase awareness and acceptance of MMD options in their treatment. Cambodia, India, Myanmar and Thailand have developed Standard of Operating Procedures (SOPs) or operational guidance for MMD/DSD implementation. The IAS building blocks approach is useful in setting out the different dimensions of MMD planning and implementation (i.e. when, where, who and what components). Myanmar, Papua New Guinea and Thailand have taken advantage of this tool to develop models for MMD implementation.

Overall, the only policy barrier that was identified is the lack of a clearly articulated policy that can be shared with all stakeholders, e.g. medical professionals, supply chain management, patients, key population (KP) communities and community-based organisations (CBOs). It is clear that countries are able to scale up MMD simply on the basis of HIV clinical treatment guidelines and the recommended frequency of follow up visits. This seems to be necessary, but not sufficient, particularly if demand-side factors, capacity building and monitoring are to be addressed. Having an action plan to scale up MMD provision may be useful as illustrated by the success of the PrEP action plan in Vietnam.

An important step seems to be integration of MMD in the national AIDS strategic plan (NASP). International guidance on MMD postdates the development of many NASPs currently in place. This is a strategic issue to be considered in the next generation of NASPs or any other related guidelines. Only one country (India) was found to have included its MMD strategy in its current NASP. Further elaboration in the NASP and other related strategies in health, such as DSD guidelines, may be helpful to maximize the benefits of MMD and to systematize it in the health system.

4.2 Implementation: All countries in the region are implementing MMD of varying duration (2-6 months). As stated above, not all countries have policies or updated treatment guidelines that include MMD. In those countries, implementation precedes policy and it appears that implementation is less systematic. It is observed that these countries are also less likely to have documentation and national statistics on MMD implementation.

Diverse MMD practices are observed in different countries and local settings, reflecting different country contexts, health systems and traditions of civil society participation. In addition, health care providers' and patients' acceptance, procurement and supply systems also influence implementation. The diversity likely reflects the state of policy development discussed above and also DSD modalities.

National MMD statistical data are sparse. In some countries, statistical documents were not obtained and use was made of the UNAIDS portal for data. Multi-year data on MMD coverage of different periodicity were difficult to obtain and trends were found in a few countries. There is a tendency to

compress data into 3- or 6-month categories to match WHO guidelines. In practice, countries are implementing a spectrum of MMD options. A more nuanced understanding of MMD is needed.

Available data show that MMD for around 3 months (2-3/3-4 months) is the most common practice. MMD for longer period, particularly 6 months is much less common. The benefits of longer MMD may not yet be fully appreciated by prescribers and PLHIV though it appears that some PLHIV networks are in favour of this. Countries which are scaling up MMD are moving towards 3-6 month MMD and in some cases, even longer.

National MMD statistical data disaggregated by month were obtained for several countries, e.g. Cambodia, Lao PDR, Papua New Guinea and Thailand. This indicates that countries are providing a spectrum of MMD options, e.g. 1-2 months, 2-3 months, 3-4 months, 4-5 months, 5-6 months and more than 6 months. This would appear to be in line with a people-centred approach in which patients are able to select the option that best suits them. The graduated approach that has been observed may offer pathways for both health care providers and patients to move towards longer duration of MMD. However, there could also be a possibility that these diverse options are selected by the prescribers/health care providers due to concerns of not being able to detect treatment complications that might occur and due to ARV stock insecurity. There needs to be a more in-depth understanding of how these MMD options are systematised as well as the way in which they are implemented.

4.3 COVID-19 and MMD: There is evidence to suggest that the COVID-19 pandemic has added greater urgency and demonstrated the feasibility and benefits of MMD to both health care providers and patients. Most countries have developed COVID-19 responses that use MMD to reduce the burden on the health system and the risk of infection among PLHIV and health care providers. The COVID-19 pandemic has also highlighted the strengths of community engagement, voluntarism, solidarity among PLHIV and the fundamental importance of PLHIV networks, KP-led organisations and CBOs working with KP and PLHIV in working together to avoid treatment disruption. The roles of PLHIV networks and CBOs, including KP-led organisations could be further extended and supported.

4.5 Pre-Exposure Prophylaxis (PrEP): PrEP is being scaled up in a limited number of countries in the region. Both Thailand and Vietnam are implementing 1-3 month modality of PrEP dispensing. There is a potential for moving towards 3-6 month MMD for PrEP clients demonstrating good adherence. The Thailand example of PrEP MMD, using the DSD building blocks framework illustrates how the approach can be operationalised to meet the different needs of KP, particularly among men who have sex with men and transgender women. This model involves KP-led health services. Successful scaling up of PrEP in Vietnam illustrates the benefit of developing a well-structured action plan to implement policy. Private service providers and KP-led service delivery, following the DSD approach, have contributed to increased uptake of PrEP.

4.6 Community ART service delivery: An important strategy for effective ART service delivery, and MMD in particular, is community ARV dispensing. This is a component of community-based ART service delivery which involves out-of-facility services. These services include counselling and support services for treatment adherence and community-based dispensing of ARV (UNAIDS and MSF, 2015). Linked to facility-based services, these can contribute to increase efficiency or treatment service delivery and reduce burden on the formal health system and patients. From an MMD perspective, it is the scheduling of clinical visits, in conjunction with the dispensing of ARV refills in community settings through establishing community ARV distribution points. For example, for stable patients, the clinical visits may take place on a yearly or 6-monthly basis while ARV refills are delivered in the community by lay providers or PLHIV peers on 3-monthly basis (i.e. community ARV dispensing/delivery).

While there is growing evidence suggesting the critical role of communities in HIV service delivery to support countries to end AIDS, the policy support for community engagement in ART service delivery and community ARV dispensing is still quite limited across the region with the exception of India, Nepal, Papua New Guinea, Philippines and Thailand. It appears that most countries are currently operating facility-based ART service delivery.

4.7 Demand for MMD: There is evidence of demand for MMD among PLHIV, reflected in the statistical data and key informant interviews. Feedback from PLHIV networks suggest that there is a growing understanding of the various benefits, for example, cost savings arising from less frequent travel to consultations, less time consumed in obtaining ARV refills and psychosocial benefits, e.g. less stress. Some PLHIV prefer 6 months while others prefer 3 or fewer months. The role of communications is important in raising awareness of MMD options, as evidenced in Vietnam's PrEP scale up.

4.8 New technologies: Telehealth or telemedicine is emerging as an innovative way to arrange clinical consultations and ARV and PrEP refills in Philippines and Thailand. It has the potential to enhance MMD implementation, bringing about cost savings and more convenient and accessible quality care for patients.

4.9 Barriers: Barriers to systematic implementation of MMD that were identified include: lack of enabling policy, strategy, guidance and M&E framework. Health care systems need to be ready to change practices to accommodate a diversity of MMD options. A critical factor is stock and supply chain management capability, particularly at local or facility level. Both health care providers and PLHIV can be resistant to adopting MMD. The latter is due to factors such as low health literacy and psychological dependency on frequent consultations. In some cases, they are not able to store ARV at home. For those using private providers, it is reported that some clients are not able to afford longer prescription periods.

Absence of ARV stock security and predictability is a major barrier in rolling out MMD more widely in countries. Stigma and discrimination continue to be a barrier to treatment access in general and potentially to MMD implementation.

4.10 M&E and research: The evidence-base on MMD implementation is often fragmented within and across countries. This is due to a lack of a standard approach to monitoring and reporting on MMD progress. There is a lack of agreed indicators for monitoring MMD implementation. Technical guidance is not yet available. Some countries have identified research needs, e.g. Cambodia, Myanmar, Philippines and Thailand. It will be helpful to find a mechanism for sharing learning on MMD across the region.

A research agenda would be helpful to support country-level implementation, including assessing demand-side and supply-side factors, preferences among both health care providers and patients as well as long-term outcomes of MMD on reduction of burdens and improvement of treatment retention.

5. Observations

MMD is being implemented in all countries in the region, following international treatment guidelines. There is diversity in approach and it may be helpful for countries to be able to exchange experiences and share learning in a more structured way.

MMD is relatively new to ART service delivery and to the Asia-Pacific region. Nevertheless, it is possible to discern promising practices that could be shared more widely to support MMD implementation, scale up, quality of services and accountability. These include:

- MMD in the National AIDS Strategic Plan (India).
- Action plan to support scaling up PrEP (Vietnam).
- Use of the DSD building blocks framework to define MMD options suitable for different clinical categories of clients (Myanmar, Papua New Guinea and Thailand).
- An operational manual to help plan ART service delivery including MMD (Myanmar).
- A detailed DSD guideline on both facility-based and out-of-facility-based services (Thailand).
- SOPs for health care providers to implement MMD (Cambodia, India, Myanmar and Thailand).
- Use of communication technologies for ARV and PrEP refills (Philippines and Thailand).
- A budget to support MMD implementation (Cambodia).
- PLHIV participation in development of treatment guidelines and service delivery (all countries. For PLHIV participation in COVID-19 response: Bangladesh, Cambodia, China, Lao PDR, Myanmar, Nepal, Pakistan and Thailand).
- KP-led service delivery, including ARV and PrEP refills (Thailand).
- Out-of-facility/community ARV dispensing models (India and Thailand).
- Communication strategies (Vietnam).
- National statistics on MMD implementation (Cambodia, Lao PDR, Papua New Guinea and Thailand).

Key recommendations

At the regional level:

1. **Convene partners and develop consensus** in the region around the need for:
    a. Additional **technical guidance** on introducing and scaling up MMD and related practices, including effective use of existing global guidance (WHO/UNAIDS);
    b. Developing a **monitoring and evaluation framework** for MMD in ARV and PrEP service delivery, including a set of indicators, approach to data gathering, analysis and reporting;
    c. Promoting **community ARV and PrEP dispensing** as a modality in DSD and ART service delivery;
    d. Developing a **research agenda** for the region on MMD issues could include:
        I. A longitudinal cohort study of differentiated ART distribution models to assess retention, adherence, viral load (VL) suppression, and adverse events among clients as outcomes of MMD
        II. A mixed method study to assess clients and providers' satisfaction with MMD
        III. A cost effectiveness analysis
        IV. Patient and provider preferences/satisfaction regarding MMD implementation
        V. Long term benefits of telemedicine and ART delivery on clinical outcomes, quality of life, self-stigma, mental health and treatment retention
2. **Convene a technical working group on MMD** to support country-level implementation across the region.
3. Encourage countries to include **costed strategies/budgets** for DSD and MMD in country planning or other relevant guidelines.
4. Facilitate **cross-country learning** on MMD adoption, adaptation and effective practices. This could include case studies of successful MMD implementation with different populations and in different resource settings.

5. Encourage countries to include activities related to MMD, including development of national DSD/MMD guidelines, SOPs and capacity building plans, in **Global Fund** funding requests.
6. Strengthen **procurement and supply chain management** systems, particularly at local or sub-national level to enable MMD planning and management.

At the country level:

Countries that wish to scale up or further institutionalise MMD may consider the following:

Policy

- Developing a specific and **accessible policy statement** for DSD and MMD that can be communicated to health care providers, PLHIV networks, patients, key populations, the community and procurement/supply chain managers to raise awareness of available options and eligibility.
- Including detailed **"how to" guidance** on MMD in ART and PrEP service delivery in both facility and out-of-facility in relevant guidelines including HIV treatment guidelines, operational manuals and SOPs. The guidance should clearly specify roles and responsibilities of ART service delivery providers and community actors.
- In countries where **PrEP** is being rolled out, there appear to be advantages in adopting the DSD building blocks framework to guide the development of different PrEP service delivery options.
- Including MMD policy/strategy in the next version of the **National AIDS Strategic Plan**. This can be part of the DSD and health care service delivery decentralization strategy.

Supply-side

- Strengthening national and decentralized capacity for **ARV supply chain management**, allowing flexibility for the local or facility level to adjust ARV stocks in a timely manner. This involves inventory management, forecasting/needs estimation, procurement, good storage practices, information management and trained human resources.
- Putting in place an appropriate **monitoring framework for MMD** that includes statistical data gathering from public, private and community ART and PrEP service providers and routine reporting.
- Identifying **cost parameters of scaling up MMD** (direct costs and savings) and including these in budgets for the National AIDS Strategic Plan and annual action/operational plans and Global Fund funding requests.
- Increasing **community and PLHIV engagement** in developing (e.g. in treatment guidelines development), planning and monitoring of ART and PrEP service delivery.
- Including more options for implementing and institutionalising **community ARV dispensing** as part of the broader client-centred ART and PrEP service delivery strategy.
- Building on country experience during the **COVID-19** pandemic, identifying which innovative practices have been effective in helping to prevent treatment disruption and consolidating these going forward.

Demand-side

- Developing **communications** tailored to the needs of PLHIV for improving health literacy and raising awareness on the availability of different MMD options and how to access these, e.g. using social media and peer educators/navigators.
- Providing **evidence and communications specifically on benefits of MMD** for the health system to support demand creation among prescribers and health care providers.
- Promoting **effective linkages** between health service providers and community ART support providers to maximize the benefits of MMD to the patient.

SECTION 1: INTRODUCTION

1. Background

Multi-month dispensing (MMD) is a modality of service delivery that aims to improve treatment retention and adherence support among people living with HIV (PLHIV) as part of the differentiated service delivery (DSD) strategy. The World Health Organisation (WHO) recommends that PLHIV who are stable on antiretroviral therapy (ART) be given medication refills of up to 3-6 months in order to minimize their trips to the health facilities/hospitals and ensure continuity of treatment. During the global pandemic of COVID-19, it has become increasingly critical to ensure PLHIV have stable access to ART through MMD and also avoid crowding at health facilities. This will require that countries have a robust ART management, effective service delivery approaches, supply chain management and appropriate monitoring strategies.

2. Purpose

The purpose of this rapid assessment is to investigate the current status of MMD in 14 countries in the Asia-Pacific region of UNAIDS - Bangladesh, Cambodia, China, Fiji, India, Indonesia, Laos, Myanmar, Nepal, Pakistan, Philippines, Papua New Guinea, Thailand and Vietnam. It will review current policies, guidelines and practices in order to determine the current stages of MMD implementation, identify good practices, factors enabling successful MMD implementation, barriers and bottlenecks. Data on experience of countries implementing 3-month and 6-month supply will be obtained and analyzed. Acceptability of MMD among various PLHIV and KP populations will be assessed. It will also provide an opportunity to investigate MMD with regard to pre-exposure prophylaxis (PrEP) in the two countries where PrEP programming is currently being implemented at some scale (Thailand and Vietnam). There is congruence between ART and PrEP and similar issues are being encountered in dispensation. Coherent guidance covering both ARV and PrEP is essential.

This rapid assessment will aim to inform the development of appropriate guidance with recommendations that are practical and applicable for all countries in the region.

3. Methods

The rapid assessment of MMD status in 14 countries in the Asia and Pacific region involved the use of internet searches for published and unpublished documents using keywords related to multi-month dispensing of ART policies and practices, supplemented by key informant interviews. UNAIDS country offices facilitated provision of relevant national documents and connected key informants from their countries for additional information and views. A conceptual framework was developed for data gathering and analysis (see Section 2).

Data gathering and analysis included the following activities:

3.1 Policy search and analysis

An internet search was conducted in order to obtain the key national HIV policy documents for the HIV and AIDS response with a focus on treatment. This involved a search of the websites of relevant institutions such as the Ministry of Health, National AIDS authorities, NGOs and organisations representing key populations and PLHIV. Searches were also conducted of key international organisation websites working on HIV such as UNAIDS and WHO. Importance was given to the National Strategic HIV/AIDS Plan as this has long been a national document of reference for the HIV response.

A search was conducted for strategy, guidelines, circulars and SOPs related to the implementation of MMD.

Once policy and guiding documents on MMD were obtained, a content review was conducted for areas relevant to this assessment such as ART, ART monitoring, ARV prescribing and dispensing, ARV refills, appointment spacing, differentiated service delivery, community-based ART service delivery, community ARV dispensing/refills and multi-month scripting/dispensing. This involved text analysis. A policy inventory was compiled for each country.

3.2 MMD implementation data search and analysis

An internet search was conducted on the implementation of ART policies and MMD guidelines with a focus on obtaining statistical data on practices involving MMD of any form or duration in ART service delivery. A search was also conducted for indicators in use relevant to monitoring MMD and which could be populated with data. As with policies, this involved searches of the websites of relevant institutions such as the Ministry of Health, National AIDS Authorities, NGOs and organisations representing key populations and PLHIV. Searches were also conducted of key international organisation websites working on HIV such as UNAIDS, WHO, USAID and INGOs. Importance was given to obtaining formal reports, reviews and statistics on national performance in ART and MMD delivery modalities as well as related research published in peer-reviewed journals. UNAIDS country offices facilitated provision of relevant national documents and connected key informants from their countries for additional information and views.

Analysis of data used the building blocks framework (WHO, 2016) as a lens to better understand different implementation practices. Where national statistics were unavailable, data on MMD implementation were taken from the UNAIDS Portal, July 2020.

3.3 Questionnaire development

Based on the literature search, a detailed structured questionnaire was developed which included questions on MMD-related guidelines and their implementation (See Annex 1). This was sent out to all responding countries participating in the assessment.

3.4 Key informant interviews

Key informant interviews were conducted using a semi-structured interview guide based on the questionnaire. These interviews were conducted remotely using zoom/social media. With support from UNAIDS, attempts were made to schedule interviews with key informants in government and civil society including PLHIV organisations. The interviews were made to triangulate data obtained through internet searches and to obtain perspectives that were less represented in available documentation such as those of PLHIV on MMD.

4. Limitations

Data gathering was limited to documents available on-line in English. Some countries give a higher priority than others to making their key policies and reports on HIV available to the public domain on a timely basis.

There was a low rate of response to the questionnaire and interviews with some countries not responding. Similarly, few stakeholders of those approached made themselves available for a key informant interview.

MMD is a relatively new policy issue in HIV treatment. It has been given a higher priority as a result of the pressures on health systems arising from the COVID-19 outbreak this year. There is therefore limited research literature on MMD policies and practices in the Asia-Pacific region. Most MMD research appears to have been conducted in sub-Saharan Africa.

SECTION 2: CONCEPTUALISING MULTI-MONTH DISPENSING

Multi-Month Dispensing (MMD), sometimes referred to as Multi-Month Scripting (MMS), is an approach to the delivery of ART services which takes advantage of advances in treatment and care that have resulted in HIV becoming a manageable chronic condition. As PLHIV on ART cohorts have matured, a growing number on treatment are virally suppressed and do not need frequent clinical and laboratory monitoring (IAS, 2016). This has led to the development of new treatment service delivery options for stable patients which involve MMD.

MMD is based on the notion that ART prescription and dispensing can be conducted on a less frequent basis for patients who are defined as being stable on ART (see box), following the WHO consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach (2016, 2nd edition). It recommends: i) less frequent clinical visits (3-6 months); and ii) less frequent medication pick-ups (3-6 months) for people stable on ART as efficient ways for alleviating the burden on both the clients and the health care system. It contributes to cost savings for health care systems (by limiting patients visits) and for patients (by decreasing number of visits to the health facilities) and improves treatment outcomes.

Clinically stable persons are defined as those who have been on ART for at least one year and show no adverse reactions to the medication to warrant regular monitoring, have no current illness or pregnancy, are not breastfeeding currently and clearly understand the lifetime treatment adherence and show success in treatment, i.e. two consecutive viral load tests below 1000 copies/ml. In the absence of viral load monitoring, rising CD4 cell counts above 200 cells/mm3 and an objective adherence measure can be used (WHO 2016).

MMD has been conceptualized within a differentiated service delivery (DSD) approach to enhance ART service delivery. DSD is defined as a client/patient-centred approach that simplifies and adapts HIV services across the HIV care cascade to reflect the needs and preferences of various groups of people vulnerable to or living HIV, while reducing unnecessary burden on the health system (Grimsrud et al, 2016). DSD is recommended by WHO in the 2016 consolidated guidelines, especially to meet the diversity of needs for KP and PLHIV.

PLHIV who are already on ART but who are clinically unstable require careful monitoring in order to provide them with timely treatment as needed. It may include timely change of ART, increased support of treatment adherence and medical care. In these circumstances, MMD is not an appropriate approach since more frequent and less predictable clinical consultations may be required.

An important strategy for effective ART service delivery, and MMD in particular, is community ARV dispensing. This is a component of community-based ART service delivery which involves out-of-facility services. These services include counselling and support services for treatment adherence and community-based dispensing of ARV. Linked to facility-based services, these can contribute to increase efficiency or treatment service delivery and reduce burden on the formal health system and patients. From an MMD perspective, it is the scheduling of clinical visits, in conjunction with the dispensing of ARV refills in community settings through establishing community ARV distribution points. For example, for stable patients, the clinical visits may take place on a yearly or 6-monthly basis while ARV refills are delivered in the community by lay providers or PLHIV peers on 3-monthly basis (i.e. community ARV dispensing/delivery).

Critical components of MMD

At the heart of MMD are three components:

1. How to achieve fewer clinical consultations. This may involve identifying and redefining appropriate and relevant roles of different health personnel, including nurses, doctors and pharmacists, and task shifting to community lay providers.
2. How to achieve fewer medication pick-ups at the facility. This can be achieved through development of fast track ARV refill delivery mechanisms (e.g. for 3 month's prescription), including community ARV dispensing.
3. How to provide psychosocial support. This may be provided more frequently, e.g. monthly and within the community rather than the health facility, engaging peers for this task.

WHO has developed a building block approach to enable decision making for DSD. This is exemplified below for clinical consultations (appointment spacing) and ARV refills (fast-track refills). It shows when, where and services are provided by whom (WHO, 2016: IAS, 2016). This framework likely applies in all settings.

	CLINICAL CONSULTATIONS	ARV REFILLS	PSYCHOSOCIAL SUPPORT
WHEN	6 monthly	3 monthly	Every three months, or as needed
WHERE	Primary care facility **and community settings**	-Pharmacy within primary care facility offering ARVs	**Community settings**
WHO	Nurse **or doctor**	Lay health care worker who distributes pre-packed ARVs	Community: psychosocial support, safe sex counselling and referral for additional counselling
WHAT	Clinical consultation re-scripting	Pre-pack ARVs	Services include: psychosocial support, safe sex counselling and referral for additional counselling

MMD and COVID-19

The COVID-19 pandemic necessitates accelerated implementation of MMD (UNAIDS 2020). The international response to COVID-19 pandemic includes measures to reduce interpersonal contact and maintain physical distancing in order to reduce risks of infection. In this context, MMD can support stable access to ARVs and continuity of treatment. MMD will help reduce the burden on health care facilities that may be struggling with or overwhelmed by COVID-19.

Conceptual framework for MMD implementation

International guidance on MMD options in ART service delivery is embedded in WHO treatment guidelines and the IAS DSD framework. Implementation guidelines have been developed by the Pan American Health Organization (PAHO) for the Americas. Based on the PAHO guidance, WHO (2016) and IAS (2016, 2018), a conceptual framework was developed to support data gathering analysis for this assessment (see box below)

Conceptual framework for national MMD implementation

1. **Policy and strategy:** HIV Policy/National AIDS Strategy that includes DSD and MMD, people-centred approach, task shifting and decentralization.
2. **HIV treatment guidelines:** Updated or revised treatment guidelines and Standard of Operating Procedures (SOPs) at facility and out of facility or community settings. These should include work flows to support the three components described above.
3. **Community ART service delivery:** for ARV dispensing, treatment adherence and retention support
4. **Communication about MMD:** with health care providers or physicians, PLHIV and CBOs for awareness raising and demand generation
5. **ARV stock and supply chain management:** This includes needs estimation, procurement planning, inventory management monitoring, to ensure local level stocks are available for dispensing selected drugs for 3 months or more. It also includes management of storage facilities and capacity for good storage practices.
6. **Strategic information and monitoring and evaluation:** This includes the selection of standard indicators for monitoring MMD implementation, reporting frameworks, evaluation and research
7. **Resources:** human resource capacity and budgets.

SECTION 3: COUNTRY FINDINGS

This section consists of the findings from the rapid assessment in the 14 countries included in this rapid assessment. For each country, the following thematic areas were investigated using online searches and the UNAIDS Portal:

- National HIV policy and strategy;
- HIV treatment guidelines and MMD;
- MMD implementation, including the impact of COVID-19;
- Barriers to implementation.

Suggestions were made on the basis of the findings for taking forward the MMD agenda.

BANGLADESH

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No	- 2-3 months follow up visits - up to 3 month, following COVID-19	No	No	Yes	- 2 months reported	No

National HIV Policy and Strategy

Bangladesh's priorities for HIV/AIDS are contained in the 4th National Strategic Plan for HIV and AIDS Response 2018-2022 (NASP IV, 2016). It has the objective of providing universal access to treatment, care and support services for PLHIV and meeting the 90-90-90 targets. The strategies that have been adopted focus on system strengthening of government, non-government and private sector facilities, strengthening capacity of service providers for medical management of PLHIV and a comprehensive community support system.

The coverage of treatment, care and support is low. In 2018, 22 percent of the estimated 14,000 PLHIV are receiving ART (UNAIDS, 2019). The NASP noted the difficulty of providing treatment services including ART in timely manner due to the procurement process and resource availability.

HIV treatment guidelines and MMD

The National Anti Retroviral Therapy Guideline, Bangladesh (NASP, 2019) recommends the visit frequency for stable patients to be every 2 or 3 months depending on drug stocks and distance that patients have to travel to ART centres. This is corroborated by PLHIV groups who report that the practice of ARV prescription is for 2 months. MMD is not specifically mentioned in the treatment guideline. Regarding community ART service delivery, it is planned that CBOs will form community ART groups comprising of PLHIV within the community to bring PLHIV to the ART centres, link them to services, conduct counselling for adherence and conduct home visits. A differentiated service delivery plan is being developed under a phased approach to link communities to services such as counselling for adherence with the support of CBOs (UNAIDS, 2018).

Following the COVID-19 outbreak this year, updated guidelines on ART were issued instructing government hospital ART centres to provide 3-month ARV for stable PLHIV and 1 month for newly initiated patients. The guidance was changed so that PLHIV could obtain ARV from any ART centres rather than their registered centres. Usually, each PLHIV is registered with one specific ART centre. There is no provision for 6-month MMD.

MMD Implementation

HIV treatment is provided across government, non-government and the private sector (NASP IV, 2016). Treatment is facility-based with no provision for community ARV dispensing. MMD coverage data from the UNAIDS Portal, July 2020 estimates that 30 percent of PLHIV on treatment are receiving 1 month or less routine ARV dispensing. For those on 3-month routine dispensing, the estimate is 70 percent. This indicates a substantial shift towards 3 month MMD. However, this needs to be verified as key informants from PLHIV networks consistently report 2-month routine dispensing only.

PLHIV and KP organisations play a critical role in ensuring that ARVs reach PLHIV. Membership of a PLHIV network has been a pre-requisite for PLHIV to receive ART as these provide systems for treatment monitoring and follow up. CBOs and PLHIV networks provide community-based ART support services including peer support, counselling and other treatment support activities. They support linkages to ART centres and may provide travel costs to PLHIV who live at a distance from the ARV centre.

During the COVID-19 outbreak, PLHIV networks and CBOs have provided additional support, including collecting ARVs from ART centres and dispatching them by courier to the patients. Peer case workers from the PLHIV network have provided home delivery services.

Barriers

There is no clear policy or costed strategy for national MMD implementation. Systems are not in place for 6-month MMD. Lack of out of facility/community-based ART dispensing policy and capacity may be a limiting factor. Drug supply management has been a factor in limiting MMD implementation. Problems have been encountered in providing ART services longer than 2 months due to shortage of ARV stocks. PLHIV networks reported stigma and discrimination, lack of transportation costs to ART facilities, and limited knowledge on ART among PLHIV contributed to low ART coverage and retention.

The availability of strategic information on MMD is an issue. There is no standard indicator or M&E framework for measuring progress on MMD.

CAMBODIA

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psychosocial support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
Includes DSD	Yes	Yes	No	Yes	31.9% on 3-6 months MMD	Indicator selected but no M&E framework yet

National HIV Policy and Strategy

The Fifth National Strategic Plan for a Comprehensive, Multi-Sectoral Response to HIV/AIDS (2019-2023) sets out national strategies to achieve the 95-95-95 targets by 2025. The Plan includes prioritizing DSD but does not include a situation analysis on MMD and there are no strategies for MMD implementation.

In 2019, it is estimated that 84 percent of PLHIV know their status, 100 percent of the estimated PLHIV population are receiving ART and 96 percent of those on treatment showed viral suppression. It is estimated that there are 73,000 PLHIV (UNAIDS, 2020).

HIV Treatment Guidelines and MMD

The National Centre for HIV/AIDS, Dermatology and Sexually Transmitted Infections (NCHADS) Cambodia has recently issued policy and treatment guidelines including MMD in early 2020. NCHADS has integrated MMD into the annual budget plan, anticipating cost implications on the need for orientation and monitoring workshops to track progress. This builds on earlier efforts for treatment scale up.

NCHADS has developed the Standard Operating Procedure on Appointment-spacing and Multi-Month Dispensing (MMD) of Antiretroviral (ARV) Treatment for People Living with HIV in Cambodia (January 2020). The SOP is available on the NCHADS website.

The recently developed MMD SOPs include clear eligibility criteria based on WHO guidance (2017). Since August 2017, NCHADS has provided a definition of stable patient on ART and 3- to 6-month appointments at all ART sites. For non-eligible patients, they will receive ARV for not greater than 90 days. A patient is considered eligible for appointment-spacing and MMD if they are stable, as defined above and meet the following additional criteria: i) age≥20 years; and ii) on first line regimen. The SOP states that it will help ART service providers to implement appointment-spacing and MMD for eligible patients which will reduce the need for patients to make frequent visits to health facilities and help to reduce provider workloads. This is an approach that frees up healthcare resources and improves efficiency of care for patients.

There is no national policy that promotes community delivery of ART (UNAIDS, 2018) and it is not included in the 2020 MMD SOP. However, during the COVID-19 outbreak this year, community-based ARV dispensing has been allowed for prison populations and home delivery for PLHIV. ARV refills are being distributed by community workers and adherence support is given.

NCHADS has developed an indicator for MMD monitoring: % of active ART patients who received MMD during the reporting period by 3, 4, 5, 6 and > 6 months.

MMD Implementation

NCHADS is in the process of scaling up MMD implementation at all ART sites nationwide. Currently, MMD is being implemented at 48 ART sites with more than 300 active patients. In 2020, NCHADS plans to cover all 69 ART sites. A letter from NCHADS to support implementation has been sent to all ART sites allowing MMD for 3-6 months.

Orientation workshops included HIV provincial managers, HIV site coordinators, ART team leaders, clinicians, counsellors, pharmacists, data management/data entry staff and NGOs working at the ART sites. This included a focus on roles and responsibilities in implementing MMD. Job aids for clinicians

and counsellors have been provided. An implementation plan for each ART site was developed. ARV stock management at site was also included. A specific MMD training module has been included in the updated training curriculum.

Implementation of MMD is scaling up. COVID-19 has increased demand among PLHIV who can see its benefits in the current phase of the response, involving physical distancing and avoiding unnecessary travels. At the same time, the outbreak has challenged implementation roll out as a result of constraints in the supply of ARV which are imported from India. The experience of MMD implementation to date has been constrained by the shortage of ARV stocks during the COVID-19 pandemic. This has limited the scope of MMD from 5 months to 2 months in the early phase. This experience constitutes a reality check for national MMD implementation.

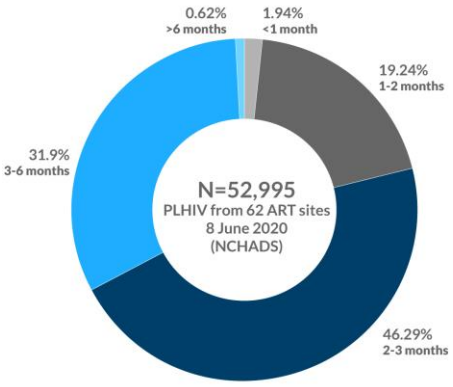

Figure 1: A snapshot of the current status of MMD coverage in Cambodia (NCHADS, 2020)

A snapshot of the current status of MMD coverage disaggregated by period of dispensing is presented here (see figure 1). Data show that currently the majority of stable PLHIV are on 2-3 month MMD (46.29%). Around a third of stable PLHIV are on 3-6 month MMD. It is too early to report the effectiveness of MMD and therefore to be able to identify enabling/success factors as well as barriers and bottlenecks beyond the issues of ARV stock availability. There is no national monitoring framework for MMD.

PLHIV networks reported a preference for 3-6 month MMD. Acceptability of MMD is an issue among a minority. For example, it is reported that an estimated 10 percent of 1,600 PLHIV supported by Chhouk Sar Clinic (CSC) refuse the option of MMD. They prefer to continue to visit health facilities regularly and have a clinical consultation with their doctors. Some PLHIV report that they do not want their family to see ARV in the house. This suggests that some PLHIV are concealing their HIV status from their family and this indicates the continuing prevalence of stigma and discrimination. Another factor discouraging PLHIV from accepting MMD is that their homes do not have basic storage facilities for ARV.

Regarding monitoring and evaluation, NCHADS has selected an indicator for measuring the percentage of ART patients who are receiving MMD of different periods - % of active ART patients who received MMD during the reporting period. See box below:

MMD Indicator: % of active ART patients who received MMD during the reporting period	
Numerator	Number active ART patients who received MMD during the reporting period
Denominator	Total number of active ART patients in the reporting period.
Disaggregation	by 3, 4, 5, 6, >6 months

The data primarily will be tracked using the existing standardized recording and reporting formats and registers of the HIV programme.

NCHADS is responsible for M&E at national level while the provincial level offices will have the responsibility to monitor the progress of each ART site in their jurisdiction. ART site teams will review and re-assess ART stable patients quarterly.

Stock and supply management

NCHADS has updated stock and supply management procedures in order to implement MMD and to avoid stock outs. For example, the report and request form has been revised and distributed to all sites. Arrangements are being made to review ARV stock at the site level and requests made for extra stock as required. It is anticipated that the national forecasting method can be retained as the consumption of drugs would be the same annually. However, at site level, forecasting of supply will need to be tailored to meet changes in patterns of demand. NCHADS is providing guidance for appropriate adjustments. It requires close collaboration between different units, including pharmacy and HIV clinics.

Barriers

Implementation of MMD is occurring at large volume ART sites but less so at smaller ART sites. MMD is not yet part of the services provided at health posts or in closed settings which mean that PLHIV in remote areas or who are in prisons are missing out. Health care providers are reportedly positively disposed towards MMD implementation. They need adequate ARV stock planning and management to support 3-6 month dispensation.

Some PLHIV who are eligible for MMD are resistant. Reasons for this are: i) their home is not far from ART sites; ii) they prefer to meet doctors every 1-2 months; iii) it is difficult to store the prescribing drugs as they are afraid of losing or that the drugs are defected and iv) they do not travel far from home for work. PLHIV who are working far from home some of whom are migrant workers prefer MMD.

CHINA

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No	No	No	No	Yes	- Up to 3 months practiced - Varied practices	No

National HIV policy and strategy

The overarching policy framework for health in China is the Health China 2030 Plan (2016) which includes prevention and control strategies of HIV/AIDS and other major diseases in a holistic and multi-sectoral approach with a strong focus on equity. This document is the first medium to long term strategic plan in the health sector developed at the national level since the founding of Peoples Republic of China in 1949.

China has put in place policies that support scaling up of ART for PLHIV. The 2016 policy provides for ART for PLHIV who are willing to receive treatment and have no contra-indications. The policy resulted in an increase in ART coverage from 67 percent in 2015 to 83.4 percent in 2018 (UNAIDS, 2019).

HIV treatment guidelines and MMD

The 4th edition of national HIV treatment guidelines (2018) contain no specific discussion or guidance on MMD. However, MMD is being practiced. The current system requires patients to collect their ARV in person as part of follow up visits. Following diagnosis, the follow up clinical consultation is scheduled on a monthly basis for a period of 3 months, following which the consultations take place every 3 months. Doctors will prescribe and dispense ARV for a period not longer than 3 months. They may prescribe for less than 3 months at their discretion. In order to receive 3 months ART medications, strict eligibility criteria have not been set but all patients undergo CD4 counts and VL testing twice a year.

The existing treatment guidelines do not allow for any longer period of prescription. Thus, 6-month MMD is not allowed (HIV Policy Lab, 2020). There is no clear definition of *stable PLHIV*, but several indicators are suggested for physicians to assess treatment status and to consider providing MMD to PLHIV, e.g. CD4 counts is improving, viral load is becoming undetectable, weight gain and no side effects.

There is no policy which allows for community ARV dispensing. Moreover, communities cannot store medicines. China has strict regulations for the management of drugs. Good record keeping of ARV in China results in efficient utilisation of ARV stocks as every pill needs to be recorded. ARV is provided free of cost to the patient and is thus closely monitored. There are no fixed dose combinations of ARV medications provided in the National Free ART programme. This results in patients taking multiple pills daily.

The National AIDS Commission conducts random checks of records at hospitals and clinics. Communities can, however, manage documentation and linkages between clinics as well as providing adherence support to PLHIV. On rare occasions, PLHIV may arrange to have the ARVs shipped to them rather than receiving them in person. This is arranged on an ad-hoc basis and at the discretion of the clinic.

SOPs have been developed for clinics, but these are not specific to HIV and PLHIV; following the Healthy China Plan 2030 approach, SOPs are integrated in scope.

MMD Implementation

MMD coverage data from the UNAIDS Portal, July 2020 estimates that 10 percent of PLHIV on treatment are receiving 1 month or less routine ARV dispensing. For those on 3-month routine dispensing, the estimate is 90 percent.

The ARV regimen (combination of TDF/AZT+3TC+EFV/NVP) that is used by more than 60% of PLHIV in the free ART programme has a higher probability of side effects than more recently developed regimens which are not yet included in the national treatment guidelines. This requires patients to visit hospitals more frequently for clinical consultations. Many PLHIV are looking elsewhere for generic fixed dose combinations. This can be obtained at their own expense or through medical insurance. Some ARV can be purchased on line and through drug purchasing channels advised by doctors. These have implications for standard of care, treatment compliance and potential treatment disruption.

From available evidence, it appears that 3-month MMD practices are varied. In some instances, doctors prescribe 3 months of medication, following a period of 3 months of treatment stability. In other facilities, 3-month MMD comes after a year of treatment stability.

Community organisations and PLHIV networks are important in providing treatment support services. This can be provided online or face-to-face, including psychological counselling, drug compliance education and adherence monitoring services. Community organisations/PLHIV networks also provide management of emergency borrowing of ARV among PLHIV.

COVID-19 impacted on PLHIV treatment resulting in unintentional and ART interruption. An online survey of PLHIV (n=5,084) investigated ART interruption during the COVID-19 outbreak (Zhongshan University, 2020). 35.1 percent reported risk of interruption and 7.6 percent experienced interruption with a median duration of 3 days. The most commonly reported risk factors for treatment interruption were lockdown and traffic restrictions (83 percent), insufficient ARV drug stocks (71.4 percent) and suspension of postal and courier services (50.6 percent). PLHIV responded to this threat of treatment interruption by adopting several strategies: i) request the designated clinic to post ARV; ii) collect ARV from a local clinic in a city of temporary stay; iii) borrow ARV from other PLHIV; and iv) borrow ARV from CBO. Health authorities recognised the threat of treatment interruption at an early stage. China CDC issued a notice guarantee free ARV for selected treatment management clinics. Following this, PLHIV could obtain ARV refills at the nearest local CDC or by post. However, many PLHIV were unaware of this notice.

Community organisations and PLHIV networks played a critical role in maintaining treatment services during the COVID-19 outbreak. They mobilised volunteers to collect ARV refills from clinics and delivered them to PLHIV in need through home delivery. Lessons learned from this experience are: i) coordinated PLHIV measures and timely government action were critical in mitigating the risk of treatment disruption; and ii) national guidance on obtaining and timely delivery needs to be addressed in a public health emergency.

Barriers

Drug shortages occur in some facilities which result in patients being given 1 month's supply. The follow-up system is rigid which causes problems for mobile PLHIV who are away from their residents. In hospitals designated for ART service delivery with a small volume of patients, there are incentives to obtain more revenue through increasing out-patient volume which requires PLHIV to go for physical examination and registration more frequently.

Low levels of education and income among PLHIV constraint treatment coverage and retention. Sub optimal ARV combinations in the programme causes higher rates of side effects in PLHIV. Fixed dose combinations of ARV are not available in national free ART programme. It has been observed that there is an increasing number of PLHIV not seeking care due to economic factors. There is high rate of loss to follow up.

FIJI

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psychosocial support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No	No	No	No	Yes	No evidence	No

National HIV policy and strategy

Fiji's national priorities for HIV/AIDS are set out in the National Strategic Action Plan on HIV and STIs, 2016-2020. It follows the UNAIDS Global 90-90-90 targets. Treatment is included within the continuum of care component. It aims to ensure continuity of treatment, as well as the timely transition from old to new treatment regimens and approaches. There is no discussion of MMD or related issues such as DSD.

In 2019, it is estimated that 50 percent of PLHIV know their status, 82 percent of the estimated PLHIV are receiving ART and 71 percent of those on treatment showed viral load suppression (UNAIDS, 2020).

HIV treatment guidelines and MMD

MMD is not included specifically in any national policy or guidelines for ART in Fiji or indeed any other Pacific Island Countries. There is no policy to implement MMD for 3 or 6 months. There is no policy on community-based dispensing (UNAIDS, 2018).

MMD Implementation

Despite the lack of policy, it is reported that MMD is being practiced. National statistics were not obtained. MMD coverage data from the UNAIDS Portal, July 2020 estimates that 20 percent of PLHIV on treatment are receiving 1 month or less routine ARV dispensing. For those on 3-month routine dispensing, the estimate is 50 percent. 30 percent of PLHIV were estimated to be on 6-month MMD. It is reported that MMD is implemented on a case by case basis based on clinical needs, historical adherence, length of initiation and patients' access to health facilities. There is a Fiji network for PLHIV. They support ART service delivery, including psychosocial support.

Barriers

There is a lack of policy, strategy and systematic approach to MMD. While some PLHIV live in remote areas, ARV are only dispensed at the HIV/STI Hubs which are government clinics. There is a lack of community ART service delivery.

There is a lack of data and monitoring framework for MMD implementation.

Stigma and discrimination is reported as a barrier to service uptake (Fiji Network for People Living with HIV, 2018). There is a need to increase the agency of PLHIV. They do not have sufficient information and understanding about treatment, care and support service options.

INDIA

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
Yes	Yes	No	Yes	Yes	- 3-month but limited coverage	No

National HIV Policy and Strategy

The National Strategic Plan for HIV/AIDS and STI 2017 – 2024 (NACO, 2017) states that differentiated care models will be introduced to decentralise treatment services to peripheral levels leading to decongestion of existing services. Further, reducing frequency of refill of ARV drugs for stable patients will provide improved quality of care. Decentralisation is required to increase access and retention to care. It is important that client receive quality treatment and care as near as possible to his/her residence.

The NSP includes scaling up of MMD. In the MMD model, stable patients are to receive refills of ARV for two months instead of one month at a time, so stable patients have six clinic visits per year instead of 12, to reduce burden on facilities and patients. It is estimated that successful implementation of 2 month MMD would reduce the average daily number of out-patients by 30-40%.

In 2019, it is estimated that 79 percent of PLHIV know their status, 82 percent of the estimated PLHIV are receiving ART and 81 percent of those on treatment showed viral load suppression. It is estimated that there are 2,140,000 PLHIV (NACO 2019).

HIV treatment guidelines and MMD

India National AIDS Control Organisation (NACO) issued guidelines on MMD in 2017 (NACO Office Memorandum, T11020/57/2017/NACO ART). This was subsequently updated in 2018. The guidelines are framed by the 90-90-90 targets for ending AIDS by 2030. A test and treat policy is already in place and a differentiated care approach has been adopted. Standard of Operating Procedure – Multi Month Dispensing of ART have been developed for 3-month MMD (NACO Office Memorandum, 2019). The SOP provides guidance on MMD eligibility criteria, definition of "stable on ART", patient flow, monitoring and follow up visits. The SOP is focused on facility-based ART service delivery and does not include community-based ART services. 6-month MMD is being piloted in PEPFAR supported sites. The possibility of 6-month MMD is currently under consideration.

The 2018 revision of the guidelines had the objectives of: i) achieving reductions in patient travel and waiting time; ii) efficient patient management at ART centres; iii) increasing treatment retention of PLHIV; iv) enhancing adherence to treatment among PLHIV; and vi) improving the overall quality of ART services (NACO Office Memorandum, 21/08/2018). The following points are highlighted:

- Patients must meet eligibility criteria
- Patients must have given their consent to be enrolled under MMD
- ARV drugs stock must be confirmed prior to enrolling patients particularly those on TLE (Tenofovir+Lamivudine+efavirenz) regimen
- Special consideration is given for women who are pregnant or breastfeeding irrespective of eligibility criteria and regimen

MMD Implementation

MMD implementation is at an early stage. MMD coverage data from the UNAIDS Portal, July 2020 estimates that 10 percent of PLHIV on treatment are receiving 1 month or less routine ARV dispensing. For those on 3-month routine dispensing, the estimate is 80 percent.

Two month's dispensation was already approved in the ART guidelines; however, uptake was very limited. 3-month dispensation for stable PLHIV has been implemented since September 2018 in a

phased manner (NACO, 2019). In the first phase, it is limited to people who are on the TLE regimen. Approximately, 600,000 PLHIV are on this regimen.

A letter was issued to State AIDS Control Societies (SACS) in September 2019 to support the scaling up of MMD. It was pointed out that MMD had not been scaled up to the required level in many states. MMD is now being scaled up. For example, the Andhra Pradesh State AIDS Control Society (APSACS) is implementing MMD across all 40 ART centres in the state. A total of 53,989 eligible PLHIV have been initiated on 3 months MMD and among these 93 percent reported on time ARV pick up. This has had a positive impact on treatment adherence. SOPs, job aids, M&E tools, regular onsite and virtual monitoring of health centres have supported the scaling up process.

ART is dispensed through facility-based DSD models including tribal hospitals, police hospitals, urban health clinics, prisons, targeted intervention sites and ART clinics. Decentralised ART services are delivered through centres at district and sub-district levels. These are Care and Support Centre (CSC) and Link ART Centre (LAC) which work in coordination with ART centres. There are 1108 LACs, 310 CSCs and 544 ART centres in 2019 (NACO, 2019). ART services in rural locations can involve community volunteers attached to LACs. These are PLHIV who deliver ARV to patients. Transport costs are met by the government. ARV refills are for 1-2 months. LACs also carry out remote ARV dispensation for PLHIV. This has been established for 2 years and intensified during COVID-19.

Link ART Centre (LAC): Since 2008, the India government has differentiated treatment and care service delivery by decentralising ART services to the sub-district level to improve treatment adherence, care and support for PLHIV. NACO developed a concept of the Link ART Centre (LAC). This provides ART services at sub-district level. An SOP was developed in 2012 for the running of LACs. LACs were set up in order to increase access to treatment service by reducing travel cost and travel time for PLHIV, improve treatment adherence and deliver care and support services in the community. LACs were intended to integrate ART services with the primary and secondary health care system (the National Rural Health Mission – NRHM). LACs provide ART to stable PLHIV. The system that has been set up requires a comprehensive clinical review every 6 months. Patients are referred to the Nodal ART Centre for this review. ARV dispensing is for a period of 1 month at a time.

There are concerns about the quality of care at LACs. There are reportedly shortages of trained staff. LACs are not the preferred option for most PLHIV.

Care and Support Centres (CSCs): Under the NACP IV, Care and Support Centres (CSCs) were established and linked to ART centres with the goal of improving the quality of life and survival rates of PLHIV. The CSCs serve as a comprehensive unit for treatment support for retention, adherence, positive living, psychosocial support, referral, linkages to need-based services, and providing an enabling environment for PLHIV. CSCs are run by civil society partners including District Level Networks (DLN) and non-government organizations (NGOs). ART dispensation for stable clients is now available at selected CSCs managed by PLHIV network as well as NGOs running Targeted Interventions for KP. Currently approximately 1,200 PLHIV are benefiting from these services.

With regard to community ARV dispensing, Community ART Refill Groups (CAGRs) are being piloted in Manipur, Mizoram and Nagaland (PEPFAR ROP 2020). CARGs are self-forming groups of stable PLHIV from the same geographical area. All members must be willing to disclose their status to each other. In the conventional model, one member is nominated by the group and he/she collects the ARVs for the whole group. NACO plans to customize this model by hiring a peer counsellor at LACs or block level who would be responsible for community level dispensation to these CAGRs and ensuring adherence of all members of the group. NACO proposes to place 1,500 such peers across the country with focus on difficult to reach areas to enhance retention (NAP 2016). CARGs were adapted from a

pilot in Mozambique and based on consultations with Ministry of Health, healthcare workers and PLHIV. Similar models have been implemented in Malawi, Swaziland and South Africa.

NACO has issued a guidance note for HIV programming in the context of the COVID-19 pandemic (Guidance Note for Persons engaged in HIV/AIDS response under National AIDS Control Programme in view of the COVID-19 scenario, March 2020). This has been sent to all SACS. Regarding MMD, the guidance states:

1. Three months MMD may be given to all stable patients on first and second line regimen following existing guidelines and subject to the availability of ARV. MMD guidelines to be followed at all ART centres and LACs.
2. As a one-time measure, MMD should be considered for unstable PLHIV on ART, along with additional counselling on the reasons for MMD, adherence to ART and to report to ART centres if respiratory symptoms or OI symptoms appear.
3. Guidelines for IMS entry of MMD will be shared with SACS by NACO.

Specific guidance for community dispensation is given as follows:

1. Strategies like community dispensation through CSCs, home delivery, volunteers, PLHIV networks and family dispensation may be allowed in principle; and
2. Local action plans may be developed in consultation with ART centres and community networks, to ensure that PLHIV receive uninterrupted ART supply without having to travel to ART centres every month, if necessitated by COVID-19 outbreaks.

The COVID-19 outbreak has accelerated the impetus towards national MMD implementation and opened the door to community dispensation, which is now allowed in principle.

Barriers

Identified barriers to scaling up ART services, including MMD are:

- PLHIV poverty and illiteracy
- PLHIV reliance on monthly meeting with doctors. The system has possibly created dependency.
- Lack of monitoring and evaluation system/framework
- Insufficient funding and trained human resources
- Inadequate support for PLHIV
- Stigma and discrimination
- ARV stock outs

INDONESIA

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No	No	No	No	Yes	- 1.1% 3 month MMD - 89.4% on 1 month - COVID-19 guidelines allow 2-month MMD	No

National HIV policy and strategy

The national HIV/AIDS priorities are set out in the National AIDS Strategic Plan 2016-2020. This commits the country to achieving the 90-90-90 targets. In 2018, the MOH released a new policy for implementing Test and Treat across the country. The policy contains the following approaches: i) routine testing for all patients in generalized epidemic areas (Papua and West Papua) and all patients with AIDS symptoms (including malnourished children), all TB patients, all pregnant women, all STI patients, all hepatitis patients, all key populations, prisoners and partners of PLHIV; ii) ARV is administered to all PLHIV regardless of clinical symptoms and CD4 count; and 3) counselling is provided to PLHIV who refuse tests and ART (MOH Letter HK.02.02/1/1564/2018).

Decentralisation is grounded in law (1999 and revised 2004, 2014). This is aimed at bringing public service delivery closer to the people. Health is a sector that must be managed concurrently by central government (MOH) and local governments (provincial and district/city) with a focus on basic health services for the people. MOH is required to develop and disseminate guidance documents on how health services including those relating to HIV are managed and delivered by the 3 levels of government. The role of MOH is fundamental in operationalizing international technical guidance and providing clear technical guidelines for all levels of government.

The HIV response in Indonesia takes place in a complex policy environment. The country is composed of 34 provinces which are made up of districts, regions and cities. Five provinces have special status which confers autonomy over their own government systems.

Treatment coverage is low. In 2019, it is estimated that 69 percent of PLHIV know their status, 23 percent of the estimated PLHIV are receiving ART and 2 percent of those on treatment showed viral load suppression. It is estimated that there are 545,000 PLHIV (Cascade data from MoH report, December 2019. HIV epidemic update was completed in June 2020, report in publication processes: UNAIDS Deep Dive Country Discussion: MMD, 2020).

HIV treatment guidelines and MMD

There is no formal policy for MMD. There is no mention of MMD or DSD in national strategic plan and treatment guidelines. There is no definition of MMD in any policy documents. There is no policy for community ART service delivery including community ARV dispensing.

A circular containing a protocol on HIV services during COVID-19 dated 2 April, 2020 states that provision of ARV for 2-month period may be considered for stable PLHIV and to be done selectively only if ARV stock is available. It also states that MMD of ARV for 2-3 months is prioritised for PLHIV living in COVID-19 epicentre areas.

MMD Implementation

Despite the lack of MMD policy, it is reported that MMD is being practiced. National statistics were not obtained. MMD coverage data from the UNAIDS Portal, July 2020 estimates that 80 percent of PLHIV on treatment are receiving 1 month or less routine ARV dispensing. For those on 3-month routine dispensing, the estimate is 20 percent. Data obtained from the Indonesia Positive Network PLHIV Survey (March 2020) indicate that implementation of MMD is rare. It was reported that the overwhelming majority of PLHIV access their ARV once a month (89.4 percent) with 1.2 percent twice a month and 5.2 percent less than a month. 1.1 percent access ARV once in 3 months. There appear to be issues with MMD coverage data.

Following the release of the MOH COVID-19 circular, the number of PLHIV receiving MMD increase from April to June by 40 percent. MOH has committed to expand MMD in the next Global Fund grant for 2021-2023. Targets have been set to increase MMD coverage from 30 percent in 2021 to 40 percent in 2022 and 60 percent in 2023.

Supply and management

There are at least 17 different first line regimen being provided for PLHIV in the country with an estimated 50 percent on TLE. There has been disruption to drug procurement since 2018, mainly affecting TLE, resulting from a failed procurement process.

There are concerns about stock outs. A review of ARV stock availability (June 2020) found that 14 ARVs assessed, the national stock availability was less than 3 months with regard to 3 ARVs: TDF, EFV and the combination ARVs – TDF+3TC+EFV. These 3 are among the most commonly used regimens. The overall stock of TLE is 2-3 months and TLD is only available for Jakarta.

There is a new procurement policy (2020) which will outsource all drug procurement to a state procurement agency external to MoH to prevent corruption. There is congestion arising from drugs bid registration to be listed in the government e-catalogue for procurement.

A rapid survey on the impact of COVID-19 to young KP and young PLHIV, 2020 found that ARV availability was problematic. Due to issues of procurement and distribution, many services have experienced ARV stock outs. 44 percent of young PLHIV surveyed reported that they had less than 1 month supply of ARV. A similar survey by the Indonesian Positive Network found that 47.6 percent of PLHIV (n=1,000) had less than 1 month supply of ARV. Counselling and peer support are perceived to be an enabling factor for staying on treatment. 4.3 percent were not able to receive ARV and 8.6 percent received partial medication.

Barriers

A major barrier to implementation of MMD in the country is the lack of a policy document, technical guidance or SOP towards DSD or MMD. This results in a lack of awareness of MMD and understanding of differentiated care. There has been a shortage of trained staff with some staff performing tasks for which they have not been trained.

Stigma and discrimination remain formidable barriers to the delivery of ART services to PLHIV. Limited community engagement for ART retention has been reported.

A UNAIDS Deep Dive Country Discussion on MMD in July 2020 identified further challenges to MMD implementation. These are:

- Low level of VL testing;
- Clinicians are unsure of patient stability; and
- Lack of cooperation framework between clinician and lay provider

LAO PDR

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No, but MMD is included in the national DSD strategy	Yes	Yes	No	Yes	- Scaling up of MMD - Majority on 3-4 months	No

National HIV policy and strategy

The government of Lao PDR has committed itself to the Three Zero Strategy (zero new HIV infections, zero discrimination, and zero AIDS-related deaths). This is reflected in the 2010 Law on HIV and AIDS Control and Prevention. The current National AIDS Strategic Plan (NASP 2016-2020) which includes strategies for rapid scaling up of HIV programmes and services to achieve 95-95-95 targets by 2025 to end AIDS by 2030.

The Centre for HIV/AIDS and STI (CHAS) has developed the National Guideline for the Use of Antiretroviral Therapy in Adults and Children (2017) which follows WHO guidance (2016). It states that all people living with HIV in Lao PDR have a right to be treated, and that testing and antiretroviral (ARV) medications are to be provided free of charge.

In 2018, it is estimated that 85 percent of PLHIV know their status, 64 percent of the estimated PLHIV population are receiving ART and 96 percent of those on treatment showed viral suppression. It is estimated that there are 12,000 PLHIV (UNAIDS, 2018).

HIV treatment guidelines and MMD

MMD is included in the national treatment guidelines (2017) for 3-6 months. The guidelines have been updated in 2020 to suggest 6 months MMD as part of the national DSD strategy. These have been disseminated to all 11 ART facilities in the country. There is no policy for community-based ART service delivery. No SOP has been developed for MMD. Eligibility criteria have been defined for MMD and include the standard definition of stable on ART.

MMD Implementation

MMD implementation is relatively new and has focused on 3 months dispensing until this year (2020). The COVID-19 pandemic has put pressure on the health system and 6 months dispensing is an option particularly for those living in more remote areas who may experience difficulty in obtaining transportation to health facilities.

ART Centres in urban settings have substantial number of patients per day (up to 50 patients). Health care providers are receptive of 6 months MMD and this is likely to be implemented in the near future in order to reduce the burden on health facilities. CHAS MMD coverage data show a clear trend towards 3-4 month MMD from 2016-2019, with a corresponding decline in the number of PLHIV on 1 month or less than 3 months. A very small number of PLHIV are on 6-month MMD and this has been relatively constant. See figure 2.

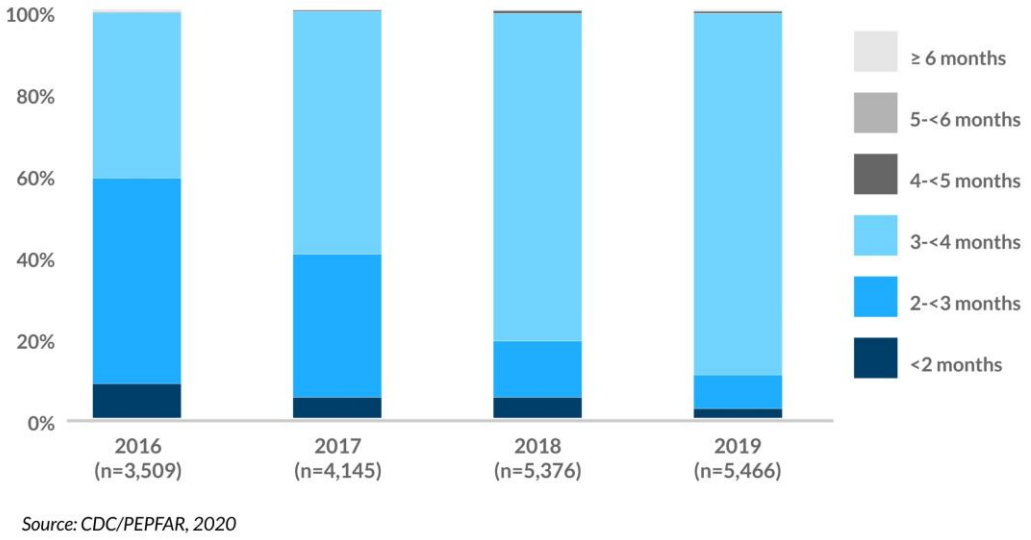

Figure 2: National MMD coverage data by different time period from all 11 ART Centres, CHAS/CDC/PEPFAR, 2020

While there is no community based ART service delivery, community-based outreach and support services constitute a vital component of treatment delivery, especially for KP. CHAS developed and disseminated national guidelines for community involvement in the HIV response in 2011. Peer navigators provide information about HIV, outreach testing services, referral for treatment and adherence support. These services are provided by NGOs and are not included in the health system.

During COVID-19, home delivery of ARVs was implemented dispensing 1-3 months delivered by peers in the community. This reached around 10 percent of PLHIV on ART.

There is a plan for UNAIDS Lao PDR to support the PLHIV Network (APL+) to pilot a community-based ARV dispensing covering 3-6 months MMD with peer support. Guidelines are being developed for peer support for this activity.

Stock and supply management

It is reported that the supply chain system functions adequately with minimal stock outs of ARV. This ensures uninterrupted treatment for PLHIV connected to the service delivery system (Sine et al, 2019). There have been stock outs of ART as a result of COVID-19. This resulted in borrowing strategies: 1) ART centres borrow from each other; and 2) PLHIV borrow from each other.

Barriers

- There are only 11 ART centres in the country. Extensive travels may be required to access treatment.
- A study of out-of-pocket spending for HIV treatment suggest that there is a very high financial burden for many households due to transportation cost to the ART centres (Bareness et al, 2015).
- There is an issue of storing ARVs at home. This is being looked into by CHAS and the PLHIV network with a view to supporting home storage to enable longer period of MMD.
- A key informant interview suggested that while the MMD guidelines are adequate they are difficult to follow.

- The last training event for ARV adherence and retention for PLHIV was conducted in 2012. Capacity building needs to be ongoing as there are new patients presenting including younger patients.

MYANMAR

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No, but MMD is detailed in a separate operational manual	Yes	Yes	No	Yes	- 3- and 6-month MMD - COVID-19 guidance prioritises 6-month MMD	No

National HIV policy and strategy

Myanmar's strategic directions for the national response to HIV are set out in the National Strategic Plan on HIV and AIDS 2016-2020 (NSP III). This includes strategies to maximise immediate treatment, ART retention and viral load monitoring. Efforts will be made to strengthen community engagement in service delivery. The NSP III prioritises investments to reach the 90–90–90 treatment targets to protect health for all and to end the epidemic by 2030. The NSP states that there are 124 public sector ART initiation sites, 173 decentralised sites providing ART maintenance and 50 NGO/INGO/private sector ART sites.

Issues to be addressed are: differentiated care including longer prescriptions, viral load monitoring, task shifting and treatment for all. ART services will be decentralized to the township level, sub-township level and station health units and rural health centres. Decentralisation will be accompanied by capacity building through training of health care workers and peers to implement quality assurance system for care and treatment. Care and treatment services will be integrated in one-stop shops or key population service centres (KSCs) for priority populations. While there is policy that allows decentralised ART sites and NGO service delivery, there appears to be no specific policy for community ARV dispensing.

Policy guidance on MMD was endorsed on 28 December 2018. This was followed by the Operational Manual on Planning and Provision of HIV Services at Health Facilities, 2019. This includes detailed MMD information and guidance.

In 2019, it is estimated that 87 percent of PLHIV know their status, 77 percent of the estimated PLHIV population are receiving ART and 94 percent of those on treatment showed viral suppression. It is estimated that there are 240,000 PLHIV (Source: 2019 HIV Estimates; National Strategic Plan, 2021-2025).

HIV treatment guidelines and MMD

Standard Operating Procedures for the Decentralised Site for ART Services in Myanmar was developed in 2015 (NAP, 2015). The Guidelines for the clinical management of HIV infection in Myanmar were updated in 2017 (NAP, 2017). This includes the WHO definition of people stable on ART. The key document is the Operational Manual on Planning and Provision of HIV Services at Health Facilities,

Ministry of Health and Sports (MOHS), 2019. The operational manual states that the following service delivery models should be implemented in ART facilities to alleviate the burden on health systems and on people taking ART:

- Stable patients who are on ART for at least 6-12 months can be seen less frequently at ART facilities.
- After thorough discussion with the patient clinic visits and ART refill visits can be scheduled every 6 months and annually for viral load testing (if routine VL testing is available).
- It is important to reclassify patients after each viral load and/or clinical assessment and address how frequently the patients should be visited.

The manual provides a DSD model of ART provision, adapted from the IAS DSD building blocks, and differentiates services according to three categories of patients. Three categories are identified: i) red; ii) yellow; and iii) green. These are defined in terms of stability on ART, how long patients have been on treatment and history of adherence.

Patients in the "red" category are in the first 6 months of ART and/or are unstable on ART. Their frequency of appointment and ART supply are as needed. For patients in the "yellow" category, MMD is offered on a 3-6 monthly basis for stable PLHIV and in the first year of ART. 6 monthly MMD is recommended for stable PLHIV on ART for 12 months or longer. For patients in the "green" category, fast track ART refills are to be provided on every alternate visit (up to 3 month's supply). After each clinical assessment/VL testing, the patient is reclassified for appropriate MMD.

Fast track ART refill can be obtained by registering, following which the patients are directed to the pharmacy or designated ARV dispensing points for pick up. When the ARV refill is picked up, a quick tuberculosis screening and adherence check are administered by the pharmacist or health care worker. See table below.

Myanmar DSD model of ART provision by category of patients

Patient Category	Definition	Seen by	Frequency of appointment	ART supply
Red	Patient in the first 6 months of ART **AND/OR** • Unstable patients due to clinical problem/adherence problem/ other reasons identified by the care providers • Patients changing ART regimen	Medical Officer (MO)/ Physician	As needed	As needed
Yellow	• Patients on current ART regimen between 6 and 12 months **AND** • Stable patients without having any clinical and adherence problem	MO/ Nurse	3-6 monthly	3-6 months' supply
Green	Patients on current ART regimen 12 months and above **AND** • Stable patients without having any clinical and adherence problem • Virologically suppressed (≤1000 copies/ml)	Nurse (MO if needed)	6 monthly	6 months' supply and *Fast-track ART refill** on every alternate visit (up to 3 months' supply in some exceptional cases
Note: The category of patient must be reassessed and reclassified at every visit				

MMD Implementation

National PLHIV cohort data indicates that approximately 47 percent of stable PLHIV are on 6-month MMD and 53 percent are on 3-month MMD. While there is no provision of community ARV dispensing, the National AIDS Programme reported working closely with community groups to ensure adherence and treatment support provided to PLHIV. High rates of treatment retention have been observed; 87 percent retention is estimated at 12-months and >80% at 24- months among the national PLHIV cohort which constitutes 77 percent of the total estimated PLHIV.

Community ARV dispensing is not considered to be necessary in the local context, particularly with mobile populations, migrant workers and people who inject drugs. ART can be accessed at any health facility these populations may move to. Referral arrangements can be made between different locations. There is a concern that community ARV dispensing may not be the best option that can reach these populations when they are out of community reach.

The COVID-19 outbreak has resulted in systemic adjustments that are needed to implement 6-month MMD nationally. The NAP issued a contingency plan/interim guidance for HIV prevention, treatment and care in response to COVID-19 (MOHS, April 2020). The following guidance was given for ART:

1. Provide ARV, preferably for 6 months (with the possibility 3 or 6-month ARV refills).
2. Prioritise MMD for children, pregnant women and non-resident from other towns.
3. Continue ART enrolment: provide ARV for 1 month at initiation and follow up with 6-months' supply.
4. A clinical consultation to be scheduled as needed.
5. Arrange storage space for commodities at ART clinic and sub-depot/transit camps. Coordinate with implementing partners for storage space.
6. Adjust the shipment of ARV drugs and other commodities to ensure an adequate supply chain and space at the central warehouse.

Barriers

At the beginning of 6-month MMD implementation in 2019, ART staff were reluctant to practice it. They were worried about capacity, PLHIV adherence, risk of stock out and ability to store ARV. COVID-19 has changed the situation leading to a scaling up of 6-month MMD.

Stock-outs of ARV were experienced at sub-national levels 4 months ago as cargo flights had been suspended. This was resolved by preponing ARV shipments. ARV stocks have been secured for the current PLHIV cohort plus the next 6 months buffer stocks.

Capacity, particularly concerning staffing, and sustainability of international support are concerns.

There is no M&E framework.

Going forward

The National AIDS Programme will be conducting a study of MMD modalities over the next three months with funding support from MOHS. It will be a mixed method study on providers and clients among selected ART facilities to assess the programmatic outcomes and reflections of providers and PLHIV comparing routine (1-month and 3-months) versus 6-months ART dispensing interval. It will also assess capacity of ART facilities and perceived benefits and barriers of MMD.

NEPAL

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No	yes	No	Yes	Yes	- 2-month MMD reported - 3-6 month MMD reported but not routine - 1 month ARV is common	No

National HIV policy and strategy

Strategic directions for the national HIV response are set out in the National HIV Strategic Plan 2016-2021: Fast track ending the AIDS epidemic as a public health threat by 2030 (MoH, 2017). Treatment strategies include focusing on KP, treatment for all regardless of CD4 count and treatment retention for viral load suppression. ⍰⍰

In 2019, it is estimated that 78 percent of PLHIV know their status, 81 percent of the estimated PLHIV population are receiving ART and 86 percent of those on treatment showed viral suppression. It is estimated that there are 30,000 PLHIV (UNAIDS, 2020).

HIV treatment guidelines and MMD

The National HIV Testing and Treatment Guidelines (2017) does not include any specific mention of MMD. However, for stable patients who have met the standard eligibility criteria, ARV can be dispensed for 3 months at a time. The guidelines also provide guidance on ART support in the community through PLHIV networks, NGOs/CBOs working in the community and community-based supporters. It states that these can be mobilized for adherence support, retention and follow up.

The updated National HIV Testing and Treatment Guidelines (2020) set out the national framework for ART. ART is to be delivered at: i) ART centres which are attached to a public health facility or hospital; ii) community-based ART sites which are stand-alone ART sites, mostly run by CBOs or NGOs staffed with trained medical doctors and health workers to provide ART services to specific KPs and at-risk populations; and iii) ART dispensing sites which provide ARV refills through trained health workers. ART dispensing sites are in government-managed health posts, sites approved by the NCASC and in line with national SOPs.

MMD Implementation

Despite the lack of MMD policy, it is reported that MMD is being practiced. National statistics were not obtained. MMD coverage data from the UNAIDS Portal, July 2020 estimates that 100 percent of PLHIV on treatment are receiving 1 month or less routine ARV dispensing. Feedback from key informant interviews indicate that MMD for 3-6 months is not routine practice in ART centres. It is reported that ART centres with a high volume of clients prescribe ARV for 2 months for stable clients. In other geographical areas, patients who have to travel from remote areas receive up to 2 months of ARV while those who live nearby receive 1 month ARV.

It was reported that patients on 3-6 month MMD show better adherence and satisfaction with ART services. Fewer visits to the ART centres resulted in cost savings to the patients (travel and accommodation costs). There is demand from PLHIV for longer MMD. Community support was found to be particularly important for the delivery of ART services and treatment adherence. Health literacy is an important issue which limits PLHIV ability to understand their own health status, illness and treatment outcomes. Currently, patients often require financial support for their transportation, lodging and food when visiting ART centres. The National Association of PLWHA in Nepal (NAPN) has volunteers providing care in the community. Community home-based care is functional in most districts.

The COVID-19 outbreak has given impetus to community ARV dispensing, whereby local hospitals, community organizations and PLHIV deliver ARVs directly to homes or local drop-off points where they are collected. They also provide treatment monitoring and adherence support via home visits and telephone calls. By mid-April 2020, as lockdown measures greatly reduced the number of PLHIV visiting the ART centre, an average of more people were receiving home deliveries of their medicines.

Barriers

Reported barriers to 3-6 month MMD include:

- Inadequate drug storage facilities
- ART counsellors' prescription preferences
- Lack of training of ART staff and high level of turnover
- ARV stock management issues
- ART interruption among migrant populations who travel within and outside the country
- Poor health literacy among PLHIV resulting in limited understanding of ART and low level of adherence

PAKISTAN

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No	No	No	No	Yes	- 20% on <3 month MMD, - 75% on 3 month and - 5% on 6 month MMD - COVID-19 allows for 2-month MMD	No

National HIV policy and strategy

Pakistan AIDS Strategy III (PAS III, 2015-2020) includes strategies to scale up the coverage and quality of ART for PLHIV in designated cities and peripheries through a phased approach. It also will support and enhance use of strategic information to monitor HIV response, coverage, quality and impact. One-stop shop facilities will be established free of cost with standardised SOPs and HIV treatment services will continue to be provided by HIV clinics formally known as ART centres. Efforts will be made to ensure the sustainability of the supply chain management of ART and HIV related medicines. There is no mention of MMD or DSD in the PAS III.

In 2019, it is estimated that 21 percent of PLHIV know their status and 58 percent of the estimated PLHIV population are receiving ART. It is estimated that there are 160,000 PLHIV (UNAIDS, 2020).

HIV treatment guidelines and MMD

Technical guidelines (National Consolidated Guidelines for HIV Treatment, 2015) do not include guidance on 3-6 month MMD.

MMD Implementation

Despite the lack of MMD policy, it is reported that MMD is being practiced. National statistics were not obtained. Data were obtained from UNAIDS Portal which show 20% of PLHIV are on <3 month MMD, 75% are on 3 month and 5 % are on 6 month MMD. While Pakistan has no policy, strategy nor guidelines on MMD, it is reported that every ART centre has its own practice depending on the preference of the attending physician and the personal circumstances of the patient. Some provide 1 month, others 3 months.

During the COVID-19 outbreak, the Common Management Unit (CMU) for AIDS, TB and Malaria in collaboration with UNAIDS, National and Provincial AIDS Control Programmes, Association of People Living with HIV and AIDS, WHO and other partners established virtual platforms and helplines to ensure that an emergency stock of certain ARVs and medicines for TB and Malaria is made available for 2 months. ARVs are made available through home delivery to those who cannot have access to services due to lock down.

Barriers

- Lack of clearly defined policy and strategy on MMD.
- Lack of technical guidelines and SOPs on MMD practices.

PAPUA NEW GUINEA

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No, but MMD is part of the DSD strategy	Yes	Yes	Yes	Yes	- 50% on 3 -month MMD	No

National HIV policy and strategy

The PNG National STI & HIV Strategy 2018–2022 adopts a fast–track approach to ending AIDS as a public health threat by 2030 by closing the testing gaps and achieving 90–90–90 prevention and treatment targets to protect health for all. It is accompanied by the National HIV Programme scale-up plan, which includes prevention, care and treatment.

HIV testing and Treatment have been expanded to all 22 provinces of the country. Over 53,848 people have been estimated as PLHIV in 2020 (Draft Spectrum Estimates / HPDB / HIV SurvDB, 2020). The estimated PLHIV from the 2020 projections has increased to over 51,000. The national treatment

coverage gap is still large at below 79% ART coverage and this is especially true for the paediatric population.

HIV treatment guidelines and MMD

The National Guidelines for HIV Care and Treatment (2019) provide healthcare workers with guidance on various aspects of care and treatment. In this, the fifth edition of the Guidelines, there is much wider coverage of; adult and pediatric HIV management including adherence issues; prevention of Parent-to-Child Transmission (PPTCT); prophylaxis and treatment of opportunistic infections (OIs); and management of co-morbidities. The national guidelines have been aligned with the WHO HIV standard guidelines. Since 2017 PNG has been implementing a "Test and Treat" policy.

The national treatment guidelines provide guidance on MMD as part of the DSD approach. Stable patients are defined as those who have received ART for at least 12 months, have no adverse drug reactions that require regular monitoring and no current illnesses. The guidance on ART for this group outlines the package which includes: drug refills, medication pick-up, laboratory monitoring (6 monthly) and cessation of CD4 count monitoring if viral load testing is available. It recommends less frequent (every 3-6 months) clinic visits and less frequent (3 -6 monthly) medication pick up. It notes that children/adolescents need to be monitored more frequently for treatment dosing /weight changes, disclosure, and adherence.

The guidelines state that health facility-based care will continue but patients may use satellite ART sites or other approach for drug refills but they should visit the ART site at least once in 6 months for laboratory monitoring. Community ARV delivery may be used for stable patients provided that sufficient support and resources can be provided. Clinic records should be updated regularly so that client is not misclassified as LTFU. Appointments for drug refills or adherence counselling can be attended by CHW or pharmacist/dispenser. The patient may see the clinician only when medical review is required or 6 monthly for laboratory monitoring. Peer-led ART refills for programmes with established trained peer educators provided regular mentoring and support can be provided to the peer educators.

MMD implementation

Implementing the Test and Treat policy increases demands on the health system including an exponential increase in demand for ART which puts a burden on the health system to provide chronic care/lifelong care to a high number of clients with diverse needs.

Health facilities are adopting the differentiated service delivery (DSD) strategy to better target the individual needs and strengthening the continuum of HIV care from testing to initiation of treatment and retention in treatment. The approach to DSD is informed by the WHO building blocks model.

HIV treatment, care and support programmes for PLHIV are made available in provincial capital (with point of care HIV viral load testing) and in selected district-level hospitals and clinics. PLHIV peer counsellors in services provide ART, with case management and adherence support reaching into community. ART is being decentralized to district level and using community ART delivery approaches to increase access in remote districts with no road access to the provincial capital. ART services are provided by nurses and medical officers. In addition, community health workers can be trained and certified to serve as ART prescribers. PLHIV provide adherence counselling support and serve as case managers.

National data on MMD for 2019-2020 show a trend towards increasing uptake of 3 months MMD. This is particularly marked during the COVID-19 outbreak. Approximately 50 percent of stable PLHIV are on 3-month MMD. Less than 10 percent are on more than 3-6 month MMD. The trend is clearly towards increasing uptake of 3-month MMD. See figure 3 below.

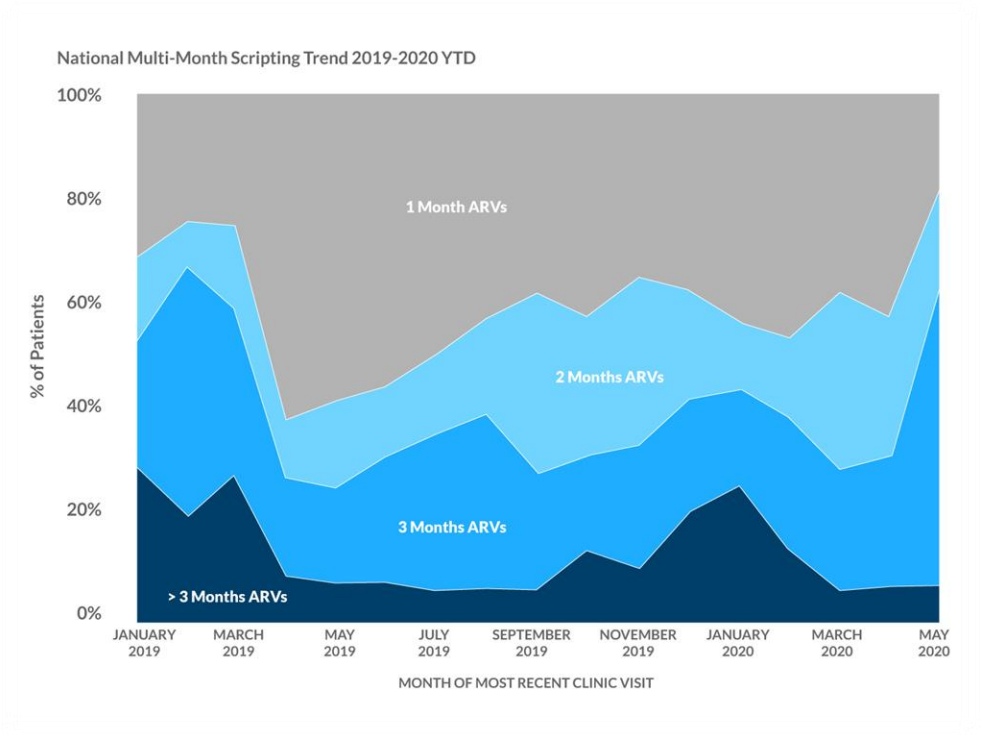

Figure 3: National MMD trend data by different time period, 2020

Barriers

There have been issues of the national procurement and supply chain management system leading to ART stock outs. High drug resistance is reported. These two issues have implications for effective MMD implementation. Other issues include: high rates of loss to follow up, the capacity of human resources including adherence counselling services and case management. There is a recognised need for reducing waiting time in health facilities to improve quality of services at the facility level and more active case management activities to enhance treatment retention. CSO capacity needs strengthening to improve treatment coverage and retention.

PHILIPPINES

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No	No	No	Yes	Yes	- 3-month MMD reported as routine, following insurance system	No

National HIV policy and strategy

The Philippines adapted the 90-90-90 UN targets in the National HIV, AIDS and STI Prevention and Control Programme (NASPCP) Health Sector Plan (2018-2020). Strategic use of ARV is one of the key strategic areas outlined in the Philippine Anti-Retroviral Therapy Implementation Plan (2017-2020). The Department of Health is working to decentralize HIV services including provision of ART and strengthen linkage to care to improve access to HIV services. The implementation plan outlines various activities for the continuous expansion of ARV service delivery points which hope to contribute towards achieving the target of 90% of PLHIV will be started on ART. HIV services can be provided by CSOs/CBOs. These include ART services to key populations such as treatment adherence and psychosocial support.

In 2019, it is estimated that 73 percent of PLHIV know their status, 61 percent of the estimated PLHIV population are receiving ART. It is estimated that there are 77,000 PLHIV (UNAIDS, 2020).

HIV treatment guidelines and MMD

The Policies and Guidelines on the Use of Antiretroviral Therapy among People Living with Human Immunodeficiency Virus (HIV) and HIV-exposed Infants (DOH, 2014) provides detailed guidance on ART initiation and management. These guidelines were developed for physicians from government and private health facilities managing PLHIV with established referral networks with DOH – designated treatment hubs. The guidelines state that the frequency of clinical monitoring of ART patients will depend on the patient's response to ART. A patient will be followed up at the minimum at 2, 4, 8 and 12 weeks after starting ART, then every 6 months once stable.

Currently, there is no specific MMD policy or guidelines for 3 or 6 months. The term MMD is not widely used in the Philippines. In practice, 3 months MMD has been routinely implemented and supported by Philippine Health Insurance Corporation (Philhealth) which provides reimbursement for out-patient HIV/AIDS treatment package (OHAT). Philhealth circular No. 011-2015 contains guidelines for the reimbursement of the OHAT package. This supplies to all accredited health care institutions that are designated by the Department of Health as HIV/AIDS treatment hubs. OHAT is based on the DOH 2014 ART Guidelines mentioned above. The package is reimbursed in 4 quarterly payments payable to the health care institutions. If no services are provided in the quarter, i.e. no consultation, there will be no payment for the quarter. This may indicate that it is possible to implement 3 months MMD but not 6 months.

It is reported that the draft of the forthcoming revised national treatment guidelines states that patients who are stable on their current ARV regimen will be maintained with 6 months' prescription as supplies allow and monitored accordingly.

MMD Implementation

Despite the lack of MMD policy, it is reported that MMD is being practiced. The health insurance structure supports MMD. National statistics were not obtained. MMD coverage data from the UNAIDS Portal, July 2020 estimates that 60 percent of PLHIV on treatment are receiving 1 month or less routine ARV dispensing. 40 percent of PLHIV were estimated to be on 3-month MMD. ARVs are accessed by PLHIV at 51 health facilities identified as DOH-designated treatment hubs and satellite treatment hubs strategically located across the country. Given the quarterly reimbursement system outlined above, it is possible to assume that most HIV health care providers in the Philippines provide 3 months MMD. There is no available monitoring and evaluation framework including indicators for MMD implementation.

Telemedicine and home ARV delivery is an acceptable option for clinically stable PLHIV. This was piloted by the Sustained Health Initiatives of the Philippines (SHIP), a non-profit organisation providing HIV treatment and care. SHIP introduced ART refill delivery by courier services to clinically stable clients and medical consultation as needed by telemedicine via popular messaging such as Skype, Viber and Zoom. Eligibility criteria have been developed – CD4 count >300 within the last year, undetectable VL in the last 12 months, no medical issues in the last 6 months and no history of being lost to follow up. Only those patients who are confident in receiving ARVs at their home are able to engage in the service. Consultations take place every 12 months online with a doctor/clinician. Refills are dispensed every 6 months by case managers, nurses or clinicians. A client satisfaction survey found high level of satisfaction with this approach.

It is reported that MMD is helpful in alleviating PLHIV expenses (travel, time and other related costs).

Barriers

Regular ARV stock outs are reported. Areas far from ART warehouse or with transportation issues may have stock issues. There is hesitation among service providers to provide 6 months MMD because of: i) lack of medical supervision; ii) inability to claim insurance benefits. Limited community engagement has been an issue for improving treatment coverage as has clinic service delivery, e.g. inefficient staffing, lack of skills and poor records management. Access to the national database of patients' records is reported to be problematic, resulting in inability to implement multi-site dispensing and ART delivery. Resistance from health care providers to implement MMD is reported and ascribed to lack of guidelines.

THAILAND

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
No, but MMD is part of the DSD guidelines	Yes for both ARV and PrEP	Yes	Yes	Yes	- 58% on 3-4-month MMD - 5.22% on 6-month MMD - KP dispensing - PrEP 1-3 month MMD	No

National HIV policy and strategy

The National AIDS Strategy, 2017-2030 commits to reaching the global 90–90–90 targets by 2020. The national HIV treatment guidelines (2017) do not include or recommend PrEP MMD. There is a recommendation for 3 months follow up as part of the National PrEP Guidelines.

In 2019, it is estimated that 94 percent of PLHIV know their status, 80 percent of the estimated PLHIV population are receiving ART and 95 percent of those on treatment showed viral suppression. It is estimated that there are 480,000 PLHIV (UNAIDS, 2019).

HIV treatment guidelines and MMD

Thailand's national HIV treatment guidelines have included provision for 3-6 months follow up visit spacing for stable patients since 2017. Supplementary guidelines focusing on differentiated care services: The Guideline on Differentiated Care for Antiretroviral Treatment Service Delivery for Stable People Living with HIV in Thai Health Care Setting was published in March 2020, building on the service manual for ARV DSD developed in 2019. This provides detailed guidance on MMD using the WHO DSD building blocks approach. It recommends clinical visits every 6 months and ART dispensing and refill every 3-6 months. The guidelines include standard eligibility criteria for stable PLHIV on ART.

The National Health Security Office (NHSO)'s Universal Health Coverage (UHC) scheme, one of the public health insurance schemes which covers more than 60 percent of PLHIV, allows dispensing up to 180-day supply of ARV for all health facilities registered under the National AIDS Programme (NAP) Plus database platform. This platform provides patients data and supports the national ARV reimbursement system.

The DSD guideline has been disseminated via the Department of Disease Control and Department of AIDS and STI websites, Zoom conferences led by MoPH and NHSO with health care providers, Zoom training sessions by the Institute for HIV Research and Innovation (IHRI)/Thai Red Cross AIDS Research Centre (TRCARC) focusing on community and key population led health services for ARV and PrEP dispensing. National guideline training is planned for 5 regions across the country in August 2020. There are over 1,000 ART sites which provide ART and receive this guidance.

MMD Implementation

The DSD guideline is new and various practices of MMD which pre-date this can be observed in hospitals providing ART services. Among these practices are:

- different frequencies in which stable patients receive ART maintenance services and ARV refills (every 1, 2, 3 or 6 months);
- ARV pick up with nurses, pharmacists or PLHIV peers in hospitals;
- ARV pick up from CBOs or hospital-affiliated satellite clinics; and
- ARV delivery by post

3-month MMD is a common practice in both health facilities and community service settings. 6-month MMD is being rolled out in high HIV burden provinces along with same-day ART initiation services and DSD activities for community ART maintenance and retention. Data from the NHSO National AIDS Programme database (02/06/2020) show that the majority of registered PLHIV are on 3 months MMD (29 percent), or up to 4 months MMD (29.46 percent). Relatively few PLHIV are on longer than 5 months MMD (5.22 percent). See figure 4. Data from 2016-2020 show a trend towards 3-4 month MMD.

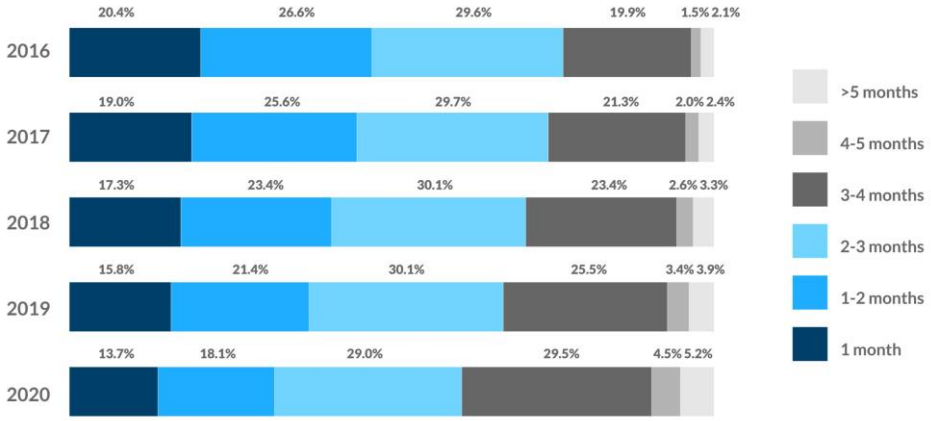

Figure 4: MMD coverage data by different time period from NHSO NAP data, June 2020

Under the DSD strategy, MMD implementation has been categorised into 2 models: i) facility-based ART delivery model; and ii) Out of facility-based ART delivery model, including community dispensing through: i) one-stop CBO services; ii) Hospital to CBO referral, referring stable cases to CBO; and iii) combined hospital and CBO services.

Further work on out-of-facility or community ART service delivery has involved developing a framework for differentiated ART service delivery specifically for KP (IHRI/TRCARC, 2018), following the 4 building blocks and which includes 6-month MMD. This follows KP-led health services (KPLHS) which is a proven service delivery model to improve service uptake among KP (Vannakit et al, 2020). See table below.

	CLINICAL CONSULTATIONS	ARV REFILLS	PSYCHOSOCIAL SUPPORT
WHEN	6 monthly	Monthly - 6 monthly	Every three months, or as needed
WHERE	KP-led health centres/clinics	KP-led health centres/clinics	KP-led health centres/clinics
WHO	Nurse or doctor	KP lay providers	Community and KP-led organisations
WHAT	Comprehensive health check using a clinical checklist, adherence check and counselling, and referral to a doctor as needed	ART refills, comprehensive health check, adherence check and counselling, and referral to doctor as needed.	Psychosocial support, safe sex counselling and referral for additional counselling

Preference for MMD: A survey on MMD acceptability among patients and health care providers has recently been conducted at 5 hospitals in 4 high HIV burden provinces in which data show that both preferred 3 months MMD (40.8 percent and 55.8 percent respectively). The data show that 13.9%, 12.3%, 40.8%, and 33.0% of patients preferred ART refill monthly, every 2 months, every 3 months, and every 6 months, respectively. Among the health care providers, 9.6%, 1.9%, and 55.8%, and 32.7% preferred ART refill monthly, every 2 months, every 3 months, and every 6 months, respectively (unpublished data, IHRI, 2020). A telemedicine service delivery option is being piloted to support ART DSD. See figure 5.

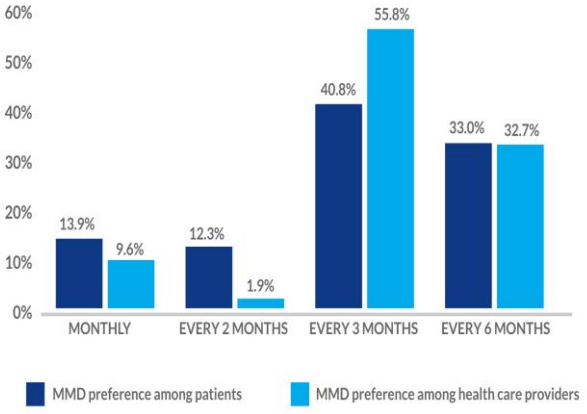

Figure 5: Preference for MMD by duration among PLHIV and health care providers, (unpublished data by IHRI, 2020)

Currently, there is no national monitoring and evaluation system of MMD. No indicators have been selected. MMD, however, is monitored at project level through cohort studies and implementation science activities. These have looked up proportions of stable clients on ART who receive different MMD practices, ART retention and viral load suppression. A national M&E framework for MMD is being developed. A study is being conducted on various models of MMD and their effects on PLHIV (IHRI, 2020).

During the COVID-19 pandemic, MMD is a policy being adopted for all chronic diseases. The supply chain and stock management systems are being adjusted accordingly. The NHSO UHC scheme and the Social Security scheme currently allows a minimum of 6 months of ARV stock. Training is required for health care providers about this policy and the recommended practices. Strong partnership of CSOs, the PLHIV network, the Thai AIDS Society and the Thai government enabled immediate policy decision making and implementation of MMD to avoid ART interruption and reduce burden at the health facilities.

PrEP and MMD

The national HIV treatment guidelines (2017) do not include or recommend PrEP MMD. There is a recommendation for 3 months follow up as part of the National PrEP Guidelines. PrEP has been provided free of charge in Thailand under research projects to support inclusion of PrEP in the UHC scheme and scale up. PrEP services are provided by both the public sector in hospitals and the community sector. The majority of PrEP clients prefer receiving PrEP and other services at the community health centres which provide KP friendly services in 5 high HIV burden provinces (IHRI/TRCARC), 2020). PrEP can be dispensed by both health care providers and KP lay providers for one month at the first visit, and 3 months thereafter according to the national PrEP guidelines.

A framework for differentiated PrEP service delivery, of which PrEP dispensing is provided by KP lay providers, is shown in the table below (Phanuphak N., AIDS2020). This constitutes a different model for PrEP MMD but consistent with DSD. This service delivery model has contributed to PrEP scaling up in Thailand. By May 2020, the total number of PrEP users is 12,713, of which 72 percent have received PrEP through this KP-led service delivery option.

Pre-COVID-19	PrEP Screening, initiation and early follow-up (0-3 months)			PrEP continuation (+3 months)
	Screening	PrEP initiation visit	Initial follow-up	Routine clinical follow-up
WHEN	Same-day		Months 1, 3	Every 3 months
WHERE	KP-led clinics		KP-led clinics	KP-led clinics
WHO	KP lay providers dispense PrEP (which is prescribed remotely by doctors)		KP lay providers	KP lay providers
WHAT	- Same-day HIV/syphilis testing - Cr, HBsAg (results come later) - PrEP counseling		- HIV testing - PrEP counseling	- HIV testing - Syphilis testing and Cretinine (every 6 months) - PrEP counseling

At the national level, there have generally been no problems with the supply of ARVs, but during the COVID-19 outbreak, PrEP supplies were disrupted. This was resolved by intensifying messages with KP clients about differentiated options for effective use of PrEP and monthly refills.

Barriers

Hospitals have limited storage capacity in their pharmacy. This constrains their ability to dispense ARV for 6 months at a time. This leads to occasional ARV shortages at the local or facility level. Avoiding ARV disruption will depend on their ability to manage ARV storage and regular communications within service delivery units and across different hospitals.

While postal service is being used effectively to supply ARV and PrEP to patients and clients in the country, there is a challenge in provide similar support to those living abroad due to restricted regulations. PLHIV network has taken their own initiative in supporting their friends to retain on ART.

Regarding PrEP, clients are advised on 3-monthly visits in order for service providers to assess and ensure client's adherence. Some providers fear that they will not be able to detect HIV infection in time if clients do not visit the service providers frequently. However, it has been observed by IHRI that PrEP clients who have poorer adherence will often stop taking PrEP even before 3 months or between 3-6 months. Those with good adherence will unlikely be infected by HIV. Therefore, 6-month PrEP MMD can be recommended if the patient wishes to take advantage of this option and adherence is ascertained.

MoPH will be developing practical guidelines for hospitals for 6 month MMD that include ARV stock management, counselling guidelines for PLHIV regarding home storage and when to seek care if they become ill. There is a plan to conduct more research on issues related to MMD, including:

- A longitudinal cohort study of differentiated ART distribution models to assess retention, adherence, VL suppression, and adverse events among clients as outcomes of MMD
- A mixed method study to assess clients and providers' satisfaction with MMD
- A cost effectiveness analysis

The need for a national M&E framework is recognised as a tool for optimising MMD modalities to support people-centred services and improve efficiency. The PrEP guidelines will accommodate longer duration of PrEP provision to 3-6 months.

VIETNAM

MMD included in national AIDS strategy	MMD recommended in national treatment guidelines		Community ARV dispensing	Psycho-social support	MMD implementation	Monitoring framework for MMD
	MMD recommended up to 3 months	MMD recommended up to 6 months				
Yes	Yes for both ARV and PrEP	No	No	Yes	- 3 month ARV MMD - 3 month PrEP MMD	No

National HIV policy and strategy

Vietnam strategic directions for HIV are set out in the National Strategy for HIV/AIDS Prevention and Control to 2020 with a vision to ending AIDS by 2030 (2012). This includes strategies to scale up ART nationwide. The Vietnam Authority of HIV/AIDS Control (VAAC) is responsible for leading on planning, managing and coordinating the scale up of HIV treatment and care programmes. The new National HIV Strategy for 2020-2030 with a vision to ending AIDS by 2030, which includes MMD, is at final stage of official approval.

In 2018, it is estimated that 65 percent of the estimated PLHIV population are receiving ART and 95 percent of those on treatment showed viral suppression. It is estimated that there are 230,000 PLHIV (UNAIDS, 2019; UNAIDS, 2020).

HIV treatment guidelines and MMD

The Ministry of Health has updated the Guidelines for HIV/AIDS Treatment and Care (2019) in line with WHO recommendations for MMD. 3-month MMD is included for patients who are stable on ARV treatment. Follow-up visits, ARV prescribing and ARV medication dispensing can be made on a multi-month basis for a period up to 90 days. Instructions are provided to patients on the storage of medications at home - store at room temperature, cool and ventilated place, avoid sunlight, out of reach of children.

SOPs have been developed and disseminated. MOH has sent out a circular adapting MMD in the context of COVID-19. This has been communicated to all health facilities, NGOs and the PLHIV network. The PLHIV network is actively engaged in technical discussion and the development of the treatment guidelines.

Community-based care is included in the national guidelines. This is carried out by commune/ward health workers, village health workers, peer groups and self-help groups of PLHIV to provide treatment adherence support. This support includes: assisting high-risk populations to access HIV testing services; linking PLHIV to treatment services; ensuring PLHIV are able to attend follow-up appointments to avoid late medication pick-up; improving treatment monitoring at home; and psychosocial support. There is no provision for community ARV dispensing, i.e. through out-of-facility community ARV distribution or dispensing.

The HIV treatment guidelines allow for multi-month ARV refills for all people on HIV treatment and for the provision of PrEP. Specific PrEP guidelines are included as a chapter in the HIV treatment guidelines, suggesting the following: first prescription at 30 days, second at 60 days and third at 90 days.

MMD Implementation

3-month MMD is being scaled up. No national statistical data were obtained through online searches for MMD implementation. With COVID-19, the country is fast tracking MMD implementation and additional flexibilities were adopted by the Government and will remain valid until it announces the end of the COVID-19 epidemic. These include:

1. 90 day-MMD for all HIV treatment medicines, including ARV and medicines for prevention of TB and OIs, regardless of the source of funding for medicines;
2. 60 to 90 day-MMD for non-stable patients, subject to doctor's assessment of individual patient situation and with advice to patients on immediate contact in case of unusual symptoms and confidential support in case patients do not come for ARV refills;
3. Simplified referral processes for PLHIV who need to access ART at alternative sites/provinces and stronger coordination among out-patient clinics.

These policy changes were guided by weighing the benefits and risks related to COVID-19 for both patients and health facilities (e.g. precautions measures, travel restrictions, quarantine, health care worker workload etc.). The stock for ARVs is adequate and monitored closely. There are buffer stocks. though the risk of stock out remains in some locations and for second line drugs due to delayed donor-funded international procurement after border closure. The situation was quickly resolved.

PrEP and MMD

PrEP was launched in 2018 with a national scale up plan for the period 2018-2020. By January 2020, there were more than 7,300 individuals benefiting from PrEP. By 31 March 2020, there were 61 PrEP clinics in 16 provinces, including 47 public and 14 private clinics.

While public services, mostly located in government-run healthcare facilities, contribute almost 60% of the total PrEP clients, private service providers, using a KP-led service delivery model, play a critical role in making PrEP accessible to thousands of KP, mainly men who have sex with men and transgender women (PEPFAR Vietnam COP20, January 2020).

1 month PrEP is prescribed at first visit, followed by 2-month PrEP dispensing on the second visit and 3-month PrEP dispensing on the third visit. Communications play an important role in generating demand for PrEP services.

Successful scaling up of PrEP in Vietnam illustrates the benefit of developing a well-structured action plan to implement policy. Private service providers and KP-led service delivery, following the Differentiated Service Delivery (DSD) approach, have contributed to increased uptake of PrEP.

Barriers

- The current software used by hospitals, especially for the Social Health Insurance-covered medication, does not allow MMD to be entered into the hospital information system.
- Lack of provision of MMD for some eligible patients. Multiple reasons are given but the most common is related to concerns over supply chain issues. In 2018-2019, Vietnam has seen the progressive transition of ART funding and procurement from external funding to the national Social Health Insurance. There remains an issue with the alignment of MMD scheduling with the Social Health Insurance processes.

SECTION 4: DISCUSSION

1. Overview

This rapid assessment provides a regional snapshot on the status of MMD implementation in 14 countries in the Asia-Pacific region. It shows that countries are generally at an early stage in adopting and adapting international guidelines on MMD and institutionalising the new treatment service delivery options. All countries in the region are implementing MMD of varying duration. Not all countries have policies or updated treatment guidelines that include MMD. In those countries, it may be concluded that implementation precedes policy. It appears that implementation is less systematic. It is observed that these countries are less likely to have documentation and national statistics on MMD implementation. A summary of the MMD status is provided in the table below.

Country	MMD policy (NASP/treatment guidelines)	MMD options being implemented for stable patients	Observations/statistics
Bangladesh	Yes	Up to 2 months and up to 3 months (post COVID-19)	National statistics not available 30% on ≤ 1 month; 70% on 3 month MMD (UNAIDS Portal)
Cambodia	Yes	3-6 months	- National statistics: 1-2 months (19.24%); 2-3 months (46.2%); 3-6 months (31.9%); >6 months (1.94%) - 2-3 month MMD is most common - Multiple MMD options are available to PLHIV - Trend data are not available
China	No	Up to 3 months	- Varied practices in place - Statistical data on MMD coverage not obtained - 10% on ≤ 1 month; 90% on 3-month MMD (UNAIDS Portal)
Fiji	No	3-6 months	- National statistics not available - 20% on ≤ 1 month, 50% on 3-month and 30% on 6-month MMD (UNAIDS Portal)
India	Yes	3 months	- National statistics not available - 10% on ≤ 1 month; 80% on 3-month MMD (UNAIDS Portal)
Indonesia	No	3 months	- National statistics not available - 80% on ≤ 1 month; 20% on 3-month MMD (UNAIDS Portal) - 1.1% on 3-month MMD (estimated by PLHIV network)
Lao PDR	Yes	3 - 6 months	- National statistics: 2-3 months (8%); 3-4 months (88%); 4-5 months (0.5%); 5-6 months (0.1%); >6 months (0.4%) - 3-4 month MMD is most common
Myanmar	Yes	3 - 6 months	- 53% on 3-month MMD - 47% on 6-month MMD
Nepal	No	1 - 6 months	- National statistics not available - 1-2 month MMD is reported to be most commonly practiced - 3-6 month MMD is uncommon - 100% on ≤ 1 month MMD (UNAIDS Portal)
Pakistan	No	1 - 3 months	- National statistics not available - 20% on <3 month MMD, 75% on 3 month and 5 % on 6 month MMD (UNAIDS Portal)

Papua New Guinea	Yes	3 - 6 months	- National statistics: 2 months (appx 10%); 3 months (appx 50%); >3 months (<10%) - 3 month MMD is most commonly practiced
Philippines	No	3 months	- National statistics not available - 60% on ≤ 1 month; 40% on 3-month MMD (UNAIDS Portal)
Thailand	Yes	1 - 6 months ARV 1- 3 months PrEP refills 3 months PrEP follow up	- National statistics: 1-2 months: (18.2%); 2-3 months (29%); 3-4 months (29.5%); 4-5 months (4.5%); >5 months (5.2%) - 3-4 month MMD is most commonly practiced - Data from 2016-2020 show a clear trend towards 3-4 month MMD
Vietnam	Yes	1- 3 months PrEP refills 3 months PrEP follow up	- National statistics not available - 70% on ≤ 1 month; 30% on 3-month MMD (UNAIDS Portal)

Overall, the only policy barrier that was identified is the lack of a clearly articulated policy that can be shared with all stakeholders, e.g. medical professionals, supply chain management, patients, key population (KP) communities and community-based organisations (CBOs). It is clear that countries are able to scale up MMD on the basis of HIV clinical treatment guidelines and the recommended frequency of follow up visits. This seems to be necessary, but not sufficient, particularly if demand-side factors, capacity building and monitoring are to be addressed.

There is evidence to suggest that the COVID-19 pandemic has added greater urgency and demonstrated the feasibility and benefits to both health care providers and patients.

Policy, strategy and guidelines

Countries in the Asia-Pacific region are at different stages in taking forward the recommendations on MMD provided by WHO and IAS and using them to develop national policy/strategy, clinical/treatment guidelines and operational guidelines. There is variation in conceptualization. Some countries have begun to integrate MMD as part of the DSD approach to HIV service delivery: Cambodia, Lao PDR, Myanmar, Papua New Guinea and Thailand. The majority of available national statements on MMD are contained in national treatment guidelines – Bangladesh, Cambodia, India, Lao PDR, Myanmar, Papua New Guinea, Thailand and Vietnam. These recommend 3-month or up to 3-month MMD (Bangladesh, India and Vietnam) or 3-6 month MMD (Lao PDR, Myanmar, Papua New Guinea and Thailand. Cambodia is the only country found in this assessment to have developed budgets for scaling up MMD.

HIV treatment guidelines obtained are largely focused on supply side implementation of MMD. Less attention appears to have been given to demand side activities with ARV prescribers, community, PLHIV and their families to increase awareness and acceptance of MMD options in their treatment. Cambodia, India, Myanmar and Thailand have developed Standard of Operating Procedures (SOPs) or operational guidance for MMD/DSD implementation. The IAS building blocks approach is useful in setting out the different dimensions of MMD planning and implementation (i.e. when, where, who and what components). Myanmar, Papua New Guinea and Thailand have taken advantage of this tool to develop models for MMD implementation.

An important step seems to be integration of MMD in the national AIDS strategic plan (NASP). International guidance on MMD postdates the development of many NASPs currently in place. This is a strategic issue to be considered in the next generation of NASPs or any other related guidelines. Only one country (India) was found to have included its MMD strategy in its current NASP. Further elaboration in the NASP and other related strategies in health, such as DSD guidelines, may be helpful to maximize the benefits of MMD and to systematize it in the health system. Having an action plan to scale up MMD provision may be useful as illustrated by the success of the PrEP action plan in Vietnam.

2. Implementation

Statistical data are sparse. Multi-year data on MMD were difficult to obtain and trends were found in few countries. Data disaggregated by period of MMD were obtained for 5 countries (Cambodia, Lao PDR, Myanmar, Papua New Guinea and Thailand).

Available data show a range of MMD options at country level. These are 1-2 months, 2-3 months, 3-4 months, 4-5 months, 6 months and longer than 6 months. This is indicative of a lack of a common approach across countries. 3-month MMD (2-3/3-4 months) appears to be the most common practice. MMD for longer period, particularly 6 months is much less common.

National MMD statistical data disaggregated by month was obtained for several countries, e.g. Cambodia, Lao PDR, Papua New Guinea and Thailand. This indicates that countries are providing a spectrum of MMD options, e.g. 1-2 months, 2-3 months, 3-4 months, 4-5 months, 5-6 months and more than 6 months. This would appear to be in line with a people-centred approach in which patients are able to select the option that best suits them. The graduated approach that has been observed may offer pathways for both health care providers and patients to move towards longer duration of MMD. However, there could also be a possibility that these diverse options are selected by the prescribers/health care providers due to concerns of not being able to detect treatment complications that might occur. There needs to be a more in-depth understanding of how these MMD options are systematised as well as the way in which they are implemented.

Some reservations were reported about longer duration of MMD. Healthcare providers have concerns regarding possible adverse outcomes such as longer MMD (e.g. 6 months) may delay detection of treatment failure or side-effects. Among the concerns, there is a fear that clients might sell their ARV or store them improperly. Patient adherence is a concern. Less frequent consultations mean losing the opportunity to motivate PLHIV and ensure ARV adherence. Some patients prefer frequent visits to meet health care workers and consult them on health issues.

2.1 PrEP

PrEP is being scaled up in a limited number of countries in the region. Both Thailand and Vietnam are implementing 1-3 month modality of PrEP dispensing. There is a potential for moving towards 3-6 month MMD for PrEP clients demonstrating good adherence. The Thailand example of PrEP MMD, using the building blocks framework illustrates how the approach can be operationalised to meet the different needs of KP, particularly among men who have sex with men and transgender women. This model involves KP-led health services. Successful scaling up of PrEP in Vietnam illustrates the benefit of developing an action plan to implement policy. Private service providers and KP-led service delivery, following the DSD approach, have contributed to increased uptake of PrEP.

2.2 Community ART service delivery

An important strategy for effective ART service delivery, and MMD in particular, is community ARV dispensing. This is a component of community-based ART service delivery which involves out-of-facility services. These services include counselling and support services for treatment adherence and community-based dispensing of ARV. Linked to facility-based services, these can contribute to increase efficiency or treatment service delivery and reduce burden on the formal health system and patients. From an MMD perspective, it is the scheduling of clinical visits, in conjunction with the dispensing of ARV refills in community settings through establishing community ARV distribution points. For example, for stable patients, the clinical visits may take place on a yearly or 6-monthly basis while ARV refills are delivered in the community by lay providers or PLHIV peers on 3-monthly basis (i.e. community ARV dispensing/delivery).

While there is growing evidence suggesting the critical role of communities in HIV service delivery to support countries to end AIDS, the policy support for community engagement in ART service delivery and community ARV dispensing is still quite limited across the region with the exception of India, Myanmar, Nepal, Papua New Guinea, Philippines and Thailand. It appears that most countries are currently operating only facility-based ART service delivery.

The COVID-19 pandemic has also highlighted the strengths of community engagement, voluntarism, solidarity among PLHIV and the fundamental importance of PLHIV networks, KP-led organisations and CBOs working with KP and PLHIV. Across the region, they have lobbied and advocated for governments to accelerate access to MMD options. They have also shown that they are integral to health system functioning, particularly at community level. PLHIV organisations have gone beyond providing psychosocial support to backstopping ART delivery, especially when the formal system is unable to deliver. This suggests that the roles of PLHIV networks and CBOs, including KP-led organisations could be further extended and supported. It also indicates the feasibility of community ARV dispensing which may not currently be part of the conventional ART service delivery system.

2.3 Demand for MMD

There is evidence of demand for MMD among PLHIV, reflected in the statistical data and key informant interviews. There is a growing understanding of the various benefits. For example, cost savings arising from less frequent travel to consultations, less time consumed in obtaining ARV refills and psychosocial benefits, e.g. less stress. Some PLHIV prefer 6 months while others prefer 3 or fewer months. There are instances that longer than 6 month or 1 year MMD is required when there is international travel involved, e.g. in the case of migrant workers. There is a need to better understand PLHIV perspectives for MMD options. Thailand has conducted a survey on MMD acceptability and preferences which could be adapted to other country contexts. The demand side of MMD needs further attention in terms of raising awareness among PLHIV and health care providers about options, risks and benefits.

2.4 New technologies

Telehealth or telemedicine is emerging as an innovative way to arrange clinical consultations and ARV and PrEP refills in Philippines and Thailand. It has the potential to enhance MMD implementation, bringing about cost savings and more convenient and accessible quality care for patients. In the light of COVID-19 and wider access to technologies, this will likely become an increasingly preferred approach.

2.5 Strategic information and M&E

The evidence-base on MMD implementation is often fragmented within and across countries. This is due to a lack of a standard approach to monitoring and reporting on MMD progress. There is a lack of agreed indicators for monitoring MMD implementation. Technical guidance is not yet available. Some countries have identified research needs, e.g. Cambodia, Myanmar, Philippines and Thailand. It will be helpful to find a mechanism for sharing learning on MMD across the region.

A research agenda may be helpful to support country-level implementation, including assessing demand-side and supply-side factors, preferences among both health care providers and patients as well as long-term outcomes of MMD on reduction of burdens and improvement of treatment retention.

3. Barriers to MMD implementation

A lack of enabling policy, strategy, updated guidance and M&E framework is found to be a barrier to systematic implementation of MMD. Health care systems need to be ready to change practices to accommodate a diversity of MMD options. A critical factor is stock and supply chain management capability, particularly at local or facility level. All countries reported having experienced shortages of ARV supply in the past 6 months, particularly at the local/facility level and during the COVID-19 outbreak. Linked to this is human resource capacity in facility and out-of-facility settings. Training to implement MMD is essential and planning to adjust staffing levels, roles and responsivities as MMD is rolled out. Implementing MMD involves addressing systemic issues in ART service delivery such as ARV procurement and stock/supply management, choice of ARV regimen and building sustainable capacity.

Both health care providers and PLHIV can be resistant to adopting MMD. The former are concerned about longer period of MMD to undermine their ability to detect treatment complications or failure. The latter is due to factors such as low health literacy and psychological dependency on frequent consultations. In some cases, they are not able to store ARV at home. For those using private providers, it is reported that some clients are not able to afford longer prescription periods.

Stigma and discrimination continue to be a barrier to treatment access in general and potentially to MMD implementation. Some PLHIV are not able to store a large quantity of ARVs as that may require them revealing their HIV status to the family.

4. Observations

MMD is being implemented in all countries in the region, following international treatment guidelines. There is diversity in approach and it may be helpful for countries to be able to exchange experiences and share learning in a more structured way.

MMD is relatively new to ART service delivery and to the Asia-Pacific region. Nevertheless, it is possible to discern promising practices that could be shared more widely to support MMD implementation, scale up, quality of services and accountability. These include:

1. MMD in the National AIDS Strategic Plan (India).
2. Action plan to support scaling up PrEP (Vietnam).
3. Use of the DSD building blocks framework to define MMD options suitable for different clinical categories of clients (Myanmar, Papua New Guinea and Thailand).
4. An operational manual to help plan ART service delivery including MMD (Myanmar).

5. A detailed DSD guideline on both facility-based and out-of-facility-based services (Thailand).
6. SOPs for health care providers to implement MMD (Cambodia, India, Myanmar and Thailand).
7. Use of communication technologies for ARV and PrEP refills (Philippines and Thailand).
8. A budget to support MMD implementation (Cambodia).
9. PLHIV participation in development of treatment guidelines and service delivery (all countries. For PLHIV participation in COVID-19 response: Bangladesh, Cambodia, China, Lao PDR, Myanmar, Nepal, Pakistan and Thailand).
10. KP-led service delivery, including ARV and PrEP refills (Thailand).
11. Out-of-facility/community ARV dispensing models (India and Thailand).
12. Communication strategies (Vietnam).
13. National statistics on MMD implementation (Cambodia, Lao PDR, Papua New Guinea and Thailand).

SECTION 5: RECOMMENDATIONS

Key recommendations

At the regional level:

1. **Convene partners and develop consensus** in the region around the need for:
    a. Additional **technical guidance** on introducing and scaling up MMD and related practices, including effective use of existing global guidance (WHO/UNAIDS);
    b. Developing a **monitoring and evaluation framework** for MMD in ARV and PrEP service delivery, including a set of indicators, approach to data gathering, analysis and reporting;
    c. Promoting **community ARV and PrEP dispensing** as a modality in DSD and ART service delivery;
    d. Developing a **research agenda** for the region on MMD issues could include:
        VI. A longitudinal cohort study of differentiated ART distribution models to assess retention, adherence, viral load (VL) suppression, and adverse events among clients as outcomes of MMD
        VII. A mixed method study to assess clients and providers' satisfaction with MMD
        VIII. A cost effectiveness analysis
        IX. Patient and provider preferences/satisfaction regarding MMD implementation
        X. Long term benefits of telemedicine and ART delivery on clinical outcomes, quality of life, self-stigma, mental health and treatment retention
2. **Convene a technical working group on MMD** to support country-level implementation across the region.
3. Encourage countries to include **costed strategies/budgets** for DSD and MMD in country planning or other relevant guidelines.
4. Facilitate **cross-country learning** on MMD adoption, adaptation and effective practices. This could include case studies of successful MMD implementation with different populations and in different resource settings.
5. Encourage countries to include activities related to MMD, including development of national DSD/MMD guidelines, SOPs and capacity building plans, in **Global Fund** funding requests.
6. Strengthen **procurement and supply chain management** systems, particularly at local or sub-national level to enable MMD planning and management.

At the country level:

Countries that wish to scale up or further institutionalise MMD may consider the following:

Policy

1. Developing a specific and **accessible policy statement** for DSD and MMD that can be communicated to health care providers, PLHIV networks, patients, key populations, the community and procurement/supply chain managers to raise awareness of available options and eligibility.
2. Including detailed **"how to" guidance** on MMD in ART and PrEP service delivery in both facility and out-of-facility in relevant guidelines including HIV treatment guidelines, operational manuals and SOPs. The guidance should clearly specify roles and responsibilities of ART service delivery providers and community actors.
3. In countries where **PrEP** is being rolled out, there appear to be advantages in adopting the DSD building blocks framework to guide the development of different PrEP service delivery options.

4. Including MMD policy/strategy in the next version of the **National AIDS Strategic Plan**. This can be part of the DSD and health care service delivery decentralization strategy.

Supply-side

5. Strengthening national and decentralized capacity for **ARV supply chain management**, allowing flexibility for the local or facility level to adjust ARV stocks in a timely manner. This involves inventory management, forecasting/needs estimation, procurement, good storage practices, information management and trained human resources.
6. Putting in place an appropriate **monitoring framework for MMD** that includes statistical data gathering from public, private and community ART and PrEP service providers and routine reporting.
7. Identifying **cost parameters of scaling up MMD** (direct costs and savings) and including these in budgets for the National AIDS Strategic Plan and annual action/operational plans and Global Fund funding requests.
8. Increasing **community and PLHIV engagement** in developing (e.g. in treatment guidelines development), planning and monitoring of ART and PrEP service delivery.
9. Including more options for implementing and institutionalising **community ARV dispensing** as part of the broader client-centred ART and PrEP service delivery strategy.
10. Building on country experience during the **COVID-19** pandemic, identifying which innovative practices have been effective in helping to prevent treatment disruption and consolidating these going forward.

Demand-side

11. Developing **communications** tailored to the needs of PLHIV for improving health literacy and raising awareness on the availability of different MMD options and how to access these, e.g. using social media and peer educators/navigators.
12. Promoting **effective linkages** between health service providers and community ART support providers to maximize the benefits of MMD to the patient.

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ANNEX 1: QUESTIONNAIRES

1. MMD Questionnaire for National Stakeholders

Instructions

Please try to answer questions as fully as possible. If you are unable to answer the questions, please indicate the reasons. There are 3 modules: 1) MMD national policy, strategy and guidelines; 2) MMD implementation; and 3) Going forwards.

If you need any clarification with regard to any of the questions, please contact Ravipa Vannakit at vannakit.r@gmail.com.

Thank you for your help and cooperation.

Module 1: MMD national policy, strategy and guidance

	Policy content	
1.	What specifically do the national treatment guidelines state about MMD? (precise text if possible)	
2.	What do the guidelines state about the definition of "stable on ART"?	
3.	Do the guidelines allow for at least 3 months supply of ARV?	
4.	Do the guidelines allow for at least 6 months supply of ARV?	
5.	Where PrEP is part of the national policy, do MMD guidelines include PrEP? If so, what are the policy linkages?	
6.	What do guidelines state about community dispensing/distribution?	
7.	What are the eligibility criteria for MMD?	
	Policy approval	
1.	When were the MMD guidelines approved? (year)	
	Policy application	
1.	Who are the national guidelines intended for? Is there a list of intended relevant recipients/stakeholders? What do the guidelines/policy say about their specific responsibilities for MMD decision making and implementation?	

	Policy communication	
1.	How have the national guidelines on MMD been disseminated, e.g. circular, directive, newsletter, etc?	
2.	Who are the recipients of communications concerning the implementation of the MMD guidelines? Is there a list?	
2.	How are local implementers informed about MMD? (nurses, pharmacists, data entry staff, etc)	
	Policy resources	
1.	What resources have been developed to support implementation of guidelines, e.g. manuals, standard of operating procedures (SOP), helpline, etc?	
2.	What training related to MMD is being made available and to whom?	
	Policy monitoring and evaluation	
1.	Who is responsible for national monitoring of MMD implementation and results?	
2.	What indicators are being used for monitoring progress in MMD implementation?	
3.	How is MMD being evaluated for outcome and impact?	
4.	Who has national/sub-national responsibility for MMD implementation?	
	Policy and planning	
1.	How are the national MMD guidelines being integrated into national AIDS plans?	
2.	What are the budget implications for including MMD in the national AIDS plan, e.g. training, procurement costs?	
3.	What targets are being set for national and sub-national roll out of MMD?	

Module 2: MMD Implementation - How is MMD implemented and how effectively?

Stock and supply management	
1. What are the arrangements for ARV stock management (in pharmacy, reimbursement systems – what reimbursement systems are in place?)? 1. National level 2. Local/hospital level	
2. What forecasting methods are used for ARV supply, including with MMD?	
3. Are there any issues with the provision of adequate stocks of ARV?	
MMD approaches/strategies	
- What are MMD approaches or strategies implemented in the country that you know of, e.g, physician-only dispensing, nurse-led dispensing, community-led ART dispensing, fast track ART refills, etc?	

Following the Differentiated Service Delivery (DSD) building blocks below, please fill in as many strategies used in your country/settings as possible.

Strategy	When e.g. monthly, every 2, 3, 6 month	Where e.g. HIV clinic, hospital, primary care clinic, community, home	Who e.g. physician, clinical officer, nurse, pharmacist, community health workers, PLHIV, peer, family	What e.g. ART initiation/refills, adherence support, lab tests, OI treatment, psychological support
1				

2				
3				
4				

Community-based ARV or PrEP dispensing	
1. What arrangements are in place for community-based dispensing of ART/PrEP/MMD?	
2. How effective are community-based dispensing arrangements?	
Enabling factors	
1. What are the enabling/success factors for MMD?	
Barriers and challenges	
1. What barriers, obstacles, bottlenecks have been reported/observed in relation to MMD implementation?	
Acceptability and refusal	
1. What evidence is there for MMD/MMS acceptability among health care providers and patients?	
2. What evidence is there that eligible patients refuse MMD, e.g. reasons for their refusal?	
3. Is there any preference among health care providers and patients for 3 months as opposed to 6 months prescription? If so, what reasons are given?	
Support mechanisms	
1. What support mechanisms exist for effective MMD implementation, e.g. online meetings, etc.?	

2. Do countries need pathways to support MMD decision making?	
Implementation results	
1. What is the current coverage of MMD among eligible patients? What coverage data are available?	
2. To what extent are MMD-related targets being met?	
3. What are the trends in MMD coverage?	
4. Are there any inequalities in MMD implementation? (e.g. rural, urban settings)	
5. What are the benefits observed if any of MMD?	
6. What research is needed to support MMD implementation?	

Module 3 Going forwards

What needs to be done?	
1. What needs to be done to improve coverage and quality, e.g. advocacy, capacity building, community participation, guiding materials, formal recognition/endorsement of different strategies/practices, etc?	
2. Do you have any recommendations to make to improve the scaling up of MMD?	

1. **Multi-month dispensing (MMD) Questionnaire for People Living with HIV Networks and Key Population Groups/Representatives**

Instructions

Please try to answer questions as fully as possible. If you are unable to answer the questions, please indicate the reasons. There are 3 modules: 1) MMD national policy, strategy and guidelines; 2) MMD implementation; and 3) Going forwards.

If you need any clarification with regard to any of the questions, please contact Ravipa Vannakit at vannakit.r@gmail.com.

Thank you for your help and cooperation.

Module 1: MMD national policy, strategy and guidance

	Policy awareness and knowledge	
1.	Are you aware of any national guidelines/policy on MMD?	
2.	How do you know about the national guidelines on MMD?	
	Policy participation	
1.	Were you or your organization and any other community organisations that you know involved in the development of the national ART policy/guidelines?	
2.	How were you or others involved in the development of MMD policy/guidelines? How did you participate?	
	MMD implementation	
1.	How are MMD guidelines/policy relevant to your work?	
2.	Are the MMD guidelines sufficiently helpful? Are there any gaps in the guidelines from your perspectives?	
3.	How are you/your organization supporting the implementation of MMD?	
	Policy communication	
1.	How was the policy communicated to you?	
	Policy resources	
1.	What resources have been provided to you to implement MMD, e.g.	

training, financial support, materials, manuals, etc?	
Policy monitoring and evaluation	
1. How do you monitor and evaluate your MMD activities?	
2. What indicators are being used for monitoring progress in MMD implementation?	

Module 2: MMD Implementation - How is MMD implemented and how effectively?

Stock and supply management	
1. Have you experienced any stock and supply issues/shortage? If so, when and what are these problems? Were you able to resolve the problems? Please give examples.	
Fast track ART refills	
2. What are MMD approaches or strategies implemented in the country that you know of, e.g, physician-only dispensing, nurse-led dispensing, community-led ART dispensing, fast track ART refills, etc?	
Following the Differentiated Service Delivery (DSD) building blocks below, please fill in as many strategies used in your country/settings as possible.  	

Strategy	When e.g. monthly, every 2, 3, 6 month	Where e.g. HIV clinic, hospital, primary care clinic, community, home	Who e.g. physician, clinical officer, nurse, pharmacist, community health workers, PLHIV, peer, family	What e.g. ART initiation/refills, adherence support, lab tests, OI treatment, psychological support
1				
2				
3				
4				

Community-based ARV or PrEP dispensing	
1. Is your organization involved in community-based dispensing of ART/PrEP/MMD? If so, how is it involved, e.g. roles, procedures?	
2. How effective are community-based dispensing arrangements?	
Enabling factors	
1. What are the enabling/success factors for MMD?	
Barriers and challenges	
1. What barriers, obstacles, bottlenecks have been reported/observed in relation to MMD implementation?	
Acceptability and refusal	
1. What evidence is there for MMD/MMS acceptability among health care providers and patients?	

2.	What evidence is there that eligible patients refuse MMD, e.g. reasons for their refusal?	
3.	Is there any preference among health care providers and patients for 3 months as opposed to 6 months prescription? If so, what reasons are given?	
	Support mechanisms	
1.	What support mechanisms exist for effective MMD implementation, e.g. online meetings, etc.?	
2.	Do you need support for MMD decision making? What kind of support do you need?	
	Implementation results	
1.	In your programming, what is the current coverage of MMD among eligible patients? What coverage data are available?	
2.	To what extent are MMD-related targets being met?	
3.	What are the trends in MMD coverage?	
4.	Are there any inequalities in MMD implementation? (e.g. rural, urban settings)	
5.	What are the benefits observed if any of MMD?	
6.	What research is needed to support MMD implementation?	

Module 3 Going forwards

	What needs to be done?	
1.	What needs to be done to improve coverage and quality, e.g. advocacy, capacity building, community participation, guiding materials, formal recognition/endorsement of different strategies/practices, etc?	
2.	Do you have any recommendations to make to improve the scaling up of MMD?	

ANNEX 2: THAILAND APPROACH FOR MMD USING THE DSD BUILDING BLOCKS.

Strategy	When/frequency	Where services are provided	Who provides the services	What services are provided
Facility Based ART delivery Model				
1.1 MMD	- 6 months prescription - 6 months dispensing	HIV Clinic	Nurse, pharmacist	- Adherence support - OI screening, - Lab FU - ARV FU every 6 months - Follow up with physician every 12 months
1.2 ARV refill	- 6 months prescription - 3 months dispensing	HIV Clinic	Nurse, pharmacist	- Adherence support - OI screening, - Lab FU - ARV FU 3 months and provide the second 3 months dispensation - FU with physician every 6 months
1.3 Refer to refill	- 3-6 months prescription - 1-3 months dispensing	District Health Promotion Hospital (primary health care unit and hospital-affiliated satellite clinic)	Health care workers	- Adherence support - OI screening, refer to physician (If abnormal symptoms found) - Lab FU - ARV FU every 1- 3 months - FU with Physician every 12 months
1.4 Refer out	- 3-6 months prescription - 3-6 months dispensing	Community Hospital /Provincial Hospital	Physician, Nurse, Pharmacist	Refer PLHIV out to Community Hospital/Provincial Hospital
Out of Facility Based ART delivery model including community dispensing				
2.1 Home and postal delivery involving partnership between hospital and CBO/PLHIV	- 3-6 months prescription - 3-6 months dispensing	Hospital	- Nurse, pharmacist	- Adherence support - OI screening, side effect assessment by phone, e-form - ARV FU - FU with physician every 12 months
			- Peer PLHIV - CBO	Coordinate with PLHIV and hospital to collect ARV for home and postal delivery
2.2 Refer to Refill by CBO	- 6 months prescription - 3 months dispensing	Drop in Centre/CBO	Health care workers, - Physician - Refill support carried out by CBO/peer PLHIV	- Adherence support - OI screening, side effect assessment, refer to physician (If abnormal symptoms found) - Lab FU - ARV FU - FU with physician every 12 months