The Asia Pacific region, home to 60 percent of the world population, has made tremendous progress toward malaria elimination, achieving a 50 percent reduction in malaria cases and an 89 percent reduction in malaria deaths in the past decade. In the Greater Mekong Subregion, the epicentre of antimalarial drug resistance, malaria cases have fallen by over 90 percent since 2000. Sri Lanka and China have been certified malaria free, while Malaysia may be eligible for certification of elimination as soon as next year.

Despite these successes, 2.5 billion people in Asia Pacific remain at risk of malaria. Ninety percent of the region’s malaria burden is concentrated in just five low- and lower-middle-income countries (LMICs): India, Papua New Guinea, Indonesia, Pakistan, and Afghanistan. Malaria – in Asia Pacific and globally – is a disease of poverty and an engine of inequality [1]: it disproportionately affects isolated and impoverished populations who live and work in rural and border areas and are hard to reach through national public health systems. The disease thrives where healthcare systems are weak and where the poor and most vulnerable lack affordable access to malaria prevention, diagnosis, and treatment services [2].

Globally, the objective to strengthen health systems and reach the unreached is embodied in the Sustainable Development Goal (SDG) target 3.8 to bring universal health coverage (UHC) to every country. While many countries in Asia Pacific have made efforts to expand UHC, substantial gaps remain across the region. The LMICs in the region continue to struggle with a high proportion of out-of-pocket spending on health (53 percent of total health expenditure1) and limited health care infrastructure and human resources [3].

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1 Average of low-middle income countries - Bangladesh, Cambodia, India, Indonesia, Lao, Mongolia, Myanmar, Nepal, Pakistan, PNG, Philippines, Solomon Islands, Vietnam.
Several of the countries with high malaria endemicity also rank poorly in essential service coverage\(^2\) (See Figure 1). The COVID-19 pandemic has exposed further weaknesses in the health systems of these countries and limitations in their disease response capacity, as well as tested their resilience to deliver critical malaria services and prevention campaigns [4]. Countries with strong commitments to UHC, however, have been able to better manage the health impacts of the pandemic such as in Korea, Sri Lanka, Thailand and Vietnam [5]. Increased momentum for UHC in Asia Pacific is critical to protect all populations against current infectious disease threats, including malaria and COVID-19, and to bolster the ability of countries to address future health challenges – in normal times and in emergencies [6].

This thematic brief highlights the links between UHC and malaria elimination in Asia Pacific, and outlines ways to integrate efforts on both fronts to support their common goals.

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\(^2\) Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population). The indicator is an index reported on a unitless scale of 0 to 100, where 0 is worst and 100 best.
UHC & Malaria: A Symbiotic Relationship

Achieving UHC and eliminating malaria are both targets of the SDG 3 on ensuring healthy lives and promoting well-being for all, officially adopted by all 193 member countries of the United Nations in 2015 as part of 17 SDGs to be achieved by 2030 – including all Asia Pacific countries [7]. The UHC target (SDG 3.8) is defined as achieving “financial risk protection, access to quality essential health services, and access to safe, effective and affordable essential medicines and vaccines for all” [8]. These three principles align closely with the malaria elimination priorities articulated in the WHO Global Malaria Programme’s Global Technical Strategy for Malaria 2016-2030 [9]. Making progress in one will advance progress on the other.

In many countries, efforts to achieve UHC can look to programs to control and eliminate malaria as entry points to strengthening primary health care systems. When malaria services are delivered by trusted and knowledgeable community-based health workers and are integrated with other diseases of concern like pneumonia and diarrhoea, population health outcomes have been improved at relatively low cost in rural areas with limited access to health facilities [10]. The elements of a health system that are necessary for strong malaria programs – for example, community health workers (CHWs), commodity procurement, laboratories, surveillance and information systems, and program management – also make for strong health systems in general. However, as it stands, national malaria programs are often still vertical (providing services exclusively for malaria), with much room for greater integration at the CHW and health facility level, as well as across other program components from procurement to surveillance, vector control, and program management.

At the same time, policies to advance UHC can accelerate malaria elimination. For example, including long-lasting insecticide-treated nets (LLINs) and quality-assured diagnostics and treatment in social health insurance (SHI) schemes, improved disease surveillance infrastructure for detection of infectious disease outbreaks, and strengthened supply-chains will all contribute to elimination efforts. Building accessible and affordable community health systems can help to prepare for existing and future disease threats [6]. Investing in cross-cutting areas of public health like research and development (R&D), primary care, surveillance systems, infrastructure, and the community-based health workforce can strengthen a country’s preparedness to respond to multiple disease threats, including malaria.

Importantly, equity must be at the forefront of efforts to achieve UHC and to eliminate malaria. The populations reached by malaria control and elimination programs are a key vulnerable group that broader health services must also reach to bring greater equity across the health system. Similarly, quality assured healthcare will improve the efficacy of malaria control interventions and prevent the re-introduction of malaria where it has been eliminated. Quality assured malaria services will also decrease health costs in the long run, producing savings which can be reinvested to ensure higher coverage of essential services and decrease OOP burden on beneficiaries, reinforcing UHC goals [11].

“If we do not end malaria, it will be very hard to achieve universal health coverage. UHC brings us together to end disease, to improve lives, and ultimately to attain the Sustainable Development Goals.”

Dr Winnie Mpanju-Shumbusho, Board Member of the RBM Partnership to End Malaria
Evidence from Asia Pacific

Healthcare in Asia Pacific is complex and fragmented, but there are many examples from the region that highlight the mutually beneficial interdependency of malaria elimination programs and UHC.

**Equitable access:** Malaria disproportionately affects underserved populations including tribal people [12] and migrant workers [13] – the same populations who would benefit most from UHC. Providing services in the hardest-to-reach places is thus needed to reach the end game of universal coverage and malaria elimination. A key tenet of UHC is to ensure CHWs are adequately trained and equipped with the right tools to provide an enlarged set of services. National UHC programs can leverage existing frontline malaria workers through an expanded scope to achieve UHC goals. Simultaneously, a country moving toward UHC can ensure malaria programs continue to reach the unreached as malaria services are integrated into its general health system. Across the Asia Pacific region, CHWs often play an essential role in bringing malaria services to vulnerable populations. In Cambodia, for example, Village Malaria Workers have played a key role in both tackling malaria and supporting the country’s frontline response to COVID-19 [14], by ensuring timely access to tests and treatments for all individuals presenting with febrile illness.

**Quality:** UHC’s commitment to quality also means putting an end to falsified alternatives that put vulnerable communities’ lives at greater risk. In low and middle-income countries in Asia, 13.7 percent of all essential medicines were found to be substandard, greater risk. In low and middle-income countries in Asia, 13.7 percent of all essential medicines were found to be substandard, with the highest prevalence found amongst antimalarial drugs [15]. Fortunately, in Asia Pacific, programs supporting such efforts already exist. The Indo-Pacific Regulatory Strengthening Program, for one, is a regional partnership between Cambodia, Indonesia, Laos, Myanmar, Papua New Guinea, Thailand, and Vietnam to fight the prevalence of fake drugs and build robust systems for accessing high-quality medicines [16]. Similarly, since 2008, WHO has been implementing therapeutic efficacy studies (TES) of antimalarial drugs to monitor drug resistance for all six countries in the Greater Mekong Subregion (GMS) [17]. Building on these efforts, particularly at the country level, accelerating UHC will provide an opportunity to revisit regulations and guidelines regarding the quality of services and commodities used across disease areas, including malaria.

**Data:** In addition to quality diagnostic tools and medicines, robust surveillance and response systems help support active case management by providing early warning of potential threats and allow for programme monitoring and evaluation. The 19-37 surveillance and response strategy, for instance, played a pivotal role in certifying China malaria-free [18]. UHC is an important step to leverage existing surveillance systems running in silos. In India, the Integrated Disease Surveillance Programme (IDSP) is a decentralised IT-enabled disease surveillance system for endemic-prone diseases. On average, the system has helped identify 30-35 outbreaks of measles, chikungunya, dengue and more weekly [19].

**Sustainable financing:** To achieve affordable universal coverage and access, social health insurance (SHI) schemes are being built to avoid significant direct out of pocket payments at the point of delivery. However, endemic diseases such as malaria are often not integrated into these schemes, and in many cases are heavily dependent on external donor funding – about 70 percent of the total expenditure on malaria control and elimination globally is funded by international donors [20]. An increased total health expenditure as a percentage of GDP will be required to support social health insurance schemes that advance UHC, integrate malaria services, and in turn reduce the financial burden of malaria on individuals and families.

Furthermore, as many countries in Asia Pacific are middle-income and have relatively low malaria burdens, they are slated for donor transition in the coming years. The Global Fund, Asia Pacific’s largest donor to malaria programs, has stated the need for domestic financing to sustain health programs and is supporting its partner countries through its Sustainability, Transition and Co-Financing policy [21]. Encouragingly, Cambodia, the Philippines, Sri Lanka, Thailand, and Vietnam have conducted transition readiness assessments and begun to plan for transition. The Philippines, Sri Lanka, and Thailand have also implemented innovative subnational advocacy strategies to successfully generate new, local investments in the malaria response (see Resources section for more info on available tools and approaches). Nonetheless, a sudden loss or significant decline in donor financial support will put the sustainability of country malaria responses at risk. Expanded and strategic domestic investments in malaria and broader health and UHC programs, alongside continued donor funding, strategic allocation of donor investments, and sustained external financing in the form of grants, loans, or innovative/blended financing mechanisms remain critical in malaria-endemic countries.

As Asia Pacific countries progressively drive down their malaria burdens, they must prioritize equitable and affordable access to quality health care services and commodities to achieve the mutually reinforcing goals of malaria elimination and UHC.
Ultimately, achieving the dual aims of universal health coverage and malaria elimination calls for a whole-of-government and whole-of-society response. Beyond health, Ministries of Finance should advocate to sustain health budgets as a higher percentage of GDP. A healthy population contributes to economic security. Along with regulatory authorities, Ministries of Defence and Foreign Affairs can facilitate collaboration across borders, particularly in areas of conflict with poor access to services. National health authorities should also work with the private sector to ensure residents in hard-to-reach areas with limited access to larger public health facilities can be tested and receive appropriate treatment. With less than ten years left to 2030, it is only through the breaking down of silos and ensuring the different pillars of government and society join forces will Asia Pacific see the much-needed acceleration towards the mutually reinforcing goals of malaria elimination and UHC.

Recommendations

Below are key recommendations for Ministries of Health across Asia Pacific that will enable them to leverage the mutually beneficial efforts of malaria elimination and achieving UHC.

Invest in the frontline: Malaria elimination and UHC both require steadfast prioritization of vulnerable populations so that no one is left behind. Community health workers, as the first line of defence against malaria and other infectious diseases, are also critical to achieving UHC at the last mile.

- Expand the community health workforce to increase access to basic health services among remote and underserved communities.
- Ensure CHWs are adequately trained and equipped with the right tools to provide an enlarged set of services, including malaria.
- Formalize integration and accreditation of these community-based providers in national health systems.

Ensure quality: Strengthening regulatory systems to ensure the quality of commodities while expanding access is critical.

- Strengthen regulatory oversight and quality assurance mechanisms throughout the supply chain.
- Ensure active collaboration between national malaria programs and primary health centres to improve access to quality malaria diagnosis, treatment and control interventions.

Leverage data: Ensuring that existing surveillance systems are robust and well-integrated is pivotal to strengthening malaria program planning and response.

- Strengthen existing surveillance systems to ensure good-quality data can be leveraged.
- Integrate all major components of a malaria surveillance system into broader health management information systems (HMIS), including, where applicable, systems for reporting notifiable diseases [23].

Step up domestic investment: Including malaria services in Social Health Insurance schemes will generate direct returns for both malaria elimination and UHC goals as domestic resources for malaria are mobilised and financial protection is extended [24].

- Make malaria a key priority of UHC planning and budgets in endemic countries to augment support received from donors in the fight against the disease.
- In line with investing in frontline workers, review the incentive structures for CHWs, including CHW line items in national budgets, such as continued education and training.

Aim for integration: Sustaining strides in malaria elimination will require the integration of vertical programs into broader health systems, especially where there are overlaps. For instance, formalising diagnosis protocols for co-infections with similar clinical symptoms will reduce inefficiencies and improve health outcomes.

- Integrate malaria elimination interventions at the community level into a broader package of care to reduce inefficiencies and improve health outcomes, while leveraging domestic resources [25].
- Formalize malaria diagnosis protocols for co-infections with similar clinical symptoms to avoid misdiagnosis and expand the role of CHWs to sustain malaria interventions and offer additional essential healthcare services.

Ultimately, achieving the dual aims of universal health coverage and malaria elimination calls for a whole-of-government and whole-of-society response. Beyond health, Ministries of Finance should advocate to sustain health budgets as a higher percentage of GDP. A healthy population contributes to economic security. Along with regulatory authorities, Ministries of Defence and Foreign Affairs can facilitate collaboration across borders, particularly in areas of conflict with poor access to services. National health authorities should also work with the private sector to ensure residents in hard-to-reach areas with limited access to larger public health facilities can be tested and receive appropriate treatment. With less than ten years left to 2030, it is only through the breaking down of silos and ensuring the different pillars of government and society join forces will Asia Pacific see the much-needed acceleration towards the mutually reinforcing goals of malaria elimination and UHC.
We have compiled a list of resources on UHC to guide malaria programs and Ministries of Health on how to address the recommendations in this brief. Feel free to contact us at info@aplma.org for more information.

## Resources

### TOOLS AND PLANNING RESOURCES

- **WHO**: UHC Compendium: A toolbox for countries to build packages of essential services, the Compendium offers country decision-makers a database of over 3,500 health actions across all health areas to adapt to their needs and expand access to better health for all. This tool supports countries in tailoring their health services to the needs of their people, to achieve and improve UHC.

- **WHO**: Triple Billion Dashboard designed to measuring the impact of activities towards improving health and promoting a safer world, by protecting the more vulnerable along the 13th General Programme of Work 2019-2023. The targets include 1 billion more to benefit from UHC, 1 billion with better protection from health emergencies and 1 billion more enjoying better health and well-being.

- **WHO WPRO and ADB**: Regional Monitoring Framework for UHC.

- **UHC2030**: UHC Data Portal showing snapshot of the state of individual country UHC commitments and an overview of global progress to facilitate cross-country comparisons.

- **UHC2030**: Toolkit on health budget literacy, advocacy and accountability for UHC.

- **UCSF Malaria Elimination Initiative (MEI) SUSTAIN Tool**: The Sustainability and Transition Readiness Assessment Tool for Malaria is designed as a multi-stakeholder consultative process to assess program strengths and risks as they relate to sustainability, and prioritize strategies and actions for the transition period from donor financing. SUSTAIN takes a holistic approach to assessing transition readiness, by evaluating sustainability and transition vulnerabilities in each of the core domains of the malaria response, including epidemiological surveillance and response, vector control, case management, and information systems.

- **P4H**: Sign up to the P4H Social Health Protection Network. The Global Network for Health Financing and Financial Protection:

- **WHO Universal Health Coverage Partnership**: A Handbook for Strategizing national health in the 21st Century. Designed to provide up-to-date and practical guidance on national health planning and strategizing for health.

- **UCSF MEI Sustainability Support**: The MEI has developed a Sustainability Model to support countries in securing a resilient and sustainable malaria response. A health system approach, including planning for integration and aligning incentives between a country’s malaria program and broader health reforms, is core to the Sustainability Model at both the national and subnational levels. The MEI’s Sustainability Model includes two complementary, country-level approaches—both implemented in partnership with national malaria programs, national and local governments, and their partners:
  - Donor Transition Support: The MEI specializes in supporting country sustainability and transition by generating actionable analyses and facilitating strategic planning and implementation with partners at the global and country levels. At the country level, the MEI accompanies malaria programs to assess transition-related priorities, risks, and opportunities; develop a plan of action to address sustainability and transition priorities; and implement the sustainability and transition plan, such as evidence-based guidelines to integrate vertical malaria programs into general health systems.
  - Malaria Budget Advocacy Support: The MEI has developed a catalytic program of support—Malaria Budget Advocacy (MBA). MEI’s MBA approach provides country support in strategy development, capacity building, and implementation to strengthen domestic political and financial support for malaria, enabling an effective and sustainable country-led response, through sub-national advocacy and leadership.

- **APLMA**: A regional initiative established under the East Asia Summit, now endorsed by 23 Heads of Government. APLMA drives implementation of the “APLMA Leaders Malaria Elimination Roadmap” to expedite elimination by 2030.

- **UHC 2030 International Health Partnership**
  - (May 2020) Living with COVID-19: Time to get our act together on health emergencies and UHC.

- **Roll Back Malaria**
  - (2020) Achieving Universal Health Coverage and a Malaria-free World: Mutually Reinforcing Goals

- **Malaria Consortium**
  - (2016) Community-based primary healthcare: the key to unlocking health for all.
CAPACITY BUILDING AND PEER LEARNING

APMEN: A regional platform for malaria elimination in the Asia Pacific. It facilitates knowledge exchange and peer-to-peer support between different partners and help address gaps in knowledge. APMEN will leverage its Working Groups to advance discussions on climate change and malaria.

Joint Learning Network, Universal Health Coverage: An innovative, country-driven network of practitioners and policymakers from around the globe who co-develop global knowledge products that help bridge the gap between theory and practice to extend health coverage to more than 3 billion people.

Malaria Consortium: Malaria Consortium approaches capacity building and development from a holistic perspective, designing interventions that address institutional as well as individual performance factors. We aim to achieve local acquisition of skills and capacity to be sustained and embedded to existing systems in the countries. We work in close partnerships with communities, community health workers, public and private sectors and our counterparts in countries. We rely on participatory processes that facilitate effective human and institutional capacity development, peer learning and quality assurance. We leverage technology and digital solutions to make capacity building more effective, and during the COVID-19 pandemic we deployed innovative capacity building solutions including virtual learning platforms, self-paced learning mobile applications, digital supervision and mentoring tools.

UHC2030: Platform to convene and build connections through joint high-level events or gathering of experts and contributes advocacy, tools, guidance, knowledge and learning.

References:

2. MMN UK, MMN and UN (2021), Leave No Fever Unresolved: The Malaria pathway to end this pandemic and prevent the next. Available: https://spark.adobe.com/page/ef9f19f78b/
8. UN Department of Economic and Social Affairs Sustainable Development. 'SDG Goal 3: Ensure healthy lives and promote well-being for all at all ages'. https://sdgs.un.org/goals/goal3
18. APMEN 2018. China’s 1-3-7 strategy as an intervention to support malaria elimination. Available: https://apmen.org/blog/chinas-1-3-7-strategy-intervention-support-malaria-elimination
30. APMEN 2018. China’s 1-3-7 strategy as an intervention to support malaria elimination. Available: https://apmen.org/blog/chinas-1-3-7-strategy-intervention-support-malaria-elimination