Malaria Innovation Narrative and Messages
As of 20 October 2020

Narrative summary

Sustained and increasing investment in innovation to fight malaria has helped save more than seven million lives and prevented one billion cases since 2000, putting eradication within reach. To ensure we continue to save lives and accelerate progress toward global goals, we need to stay a step ahead of an ever-adapting parasite and mosquito. This will only be possible through ongoing innovation in developing and scaling up a suite of tools that can deliver the greatest impact.

Ongoing innovation – in science, technology and finance – is essential to scaling-up access to proven interventions developed with research investments made years ago. In addition, new investments and policies now are critical to developing and delivering the transformative tools required to anticipate inevitable challenges ahead. By increasing investment in innovation now, giving countries the ability to use the right set of tools to meet their needs, and committing to accelerate access to life-saving tools, we can end malaria and deliver a healthier, more prosperous world.

Key messages

Throughout history, investments in innovation and access to innovation have powered progress toward a malaria-free world.

- Human history is intertwined with the ancient and deadly malaria parasite and the mosquitoes that carry it.
  - Over millennia, malaria has killed billions of people, devastated communities, limited economic growth and altered the trajectory of global development.
  - For centuries, scientists, advocates, the private and public sectors, and communities have worked in partnership to discover and scale up new and better ways to protect our communities from this deadly disease.
- Time and again, investments in research and development and scaling up proven innovative tools have helped the world stay a step ahead of the constantly-adapting malaria parasite and the mosquitoes that transmit it.
  - From the discovery that malaria isn’t transmitted by ‘bad air’ rather a parasite-carrying mosquito, to advances in technology to ensure that the right tool is targeted to the right place at the right time, innovation saves lives, reduces malaria’s burden on health systems, and ensures the most effective use of limited resources.
  - Every time the malaria parasite and mosquito vector adapted to existing tools, making them ineffective, new investments brought forth innovations to take their place.
- Thanks to significant investments in the last two decades, today, the toolbox of proven life-saving malaria interventions to prevent, diagnose and treat the disease – including drugs, diagnostics, insecticides, a first vaccine, genetic epidemiology and collection and use of data – is stronger and more diverse than ever before.
  - Long-term global commitment to the research, development, and delivery of transformative tools for fighting malaria contributed to saving 7 million lives from malaria and preventing 1 billion malaria cases since 2000.
• Significant investment now in researching, developing and scaling up transformative tools will ensure we have an effective set of tools in the last mile of the malaria fight.
  ◦ Experts agree that ending malaria for good is a scientific possibility and a global necessity, achievable only if we stay the course in our commitment to bring forward transformative innovations (i.e., Lancet Commission, SAGme).

Yesterday's innovations alone cannot defeat malaria. The parasite and the mosquitoes that spread it are constantly adapting to resist even our most effective tools.

• History has shown we can’t be complacent with the tools we have today. At every turn in our fight against malaria, the parasite and mosquito have fought back, rendering once-groundbreaking medicines, insecticides and approaches ineffective, and allowing the disease to resurge.
  ◦ The Global Malaria Eradication Programme brought significant progress in the fight against the disease in the 1960s. But once the program was abandoned, malaria resurged in areas where it had been under control. In India, cases climbed from fewer than 200,000 to more than 6 million less than two decades later. In Zanzibar, where malaria prevalence had been reduced from 76% to less than 5% in just ten years, case counts soared, increasing prevalence ten-fold.

• Today is no exception. Growing resistance to insecticides and drugs is threatening our most effective tools.
  ◦ Reaching the most vulnerable requires developing and applying new technologies and strategies to an ancient disease, and ensuring we’re targeting and timing proven and new tools and approaches where they’re needed most and – as efficiently and effectively as possible.

• While global efforts have led to exceptional progress, this success has not been shared by all. Every year, more than 200 million people, a disproportionate number of which are children, babies and pregnant women, are infected with malaria. And 400,000 people, overwhelmingly children under 5, die from the disease. This suffering and death could be prevented, yet proven interventions remain out of reach.
  ◦ In 2018, 11 million pregnant women were infected with malaria in sub-Saharan Africa, leading to nearly 900,000 babies born with low birthweight. We need innovative tools aimed at the most vulnerable.

Continued scientific, funding and delivery innovations, as well as quickly scaling up use of a mix of proven tools, are essential to stay ahead of malaria, and one day ending the disease.

• Expanding access to existing tools and targeting those tools where they’re needed most are essential to protecting people from malaria. But to stay ahead of challenges and ultimately end the disease, we need to invest to develop new tools and approaches where current interventions are no longer effective.
  ◦ Innovation can help fill gaps and ensure everyone at risk is protected from malaria.
    ◦ Mosquito nets don’t sufficiently protect people where some malaria-transmitting mosquitoes bite during the day, and seasonal malaria chemoprevention doesn’t work if families can’t access the intervention because they live in remote or hard-to-reach locations, or due to instability or conflict.
  ◦ We need innovation for streamlined interventions that can more efficiently and effectively treat malaria, to help ensure a diagnosis does not mean a death sentence.
    ◦ Powerful medicines are limited in their impact if regimens are complex, costly or challenging to follow, or if emergent resistance renders them ineffective.
  ◦ Innovation can help deliver next-generation diagnostic tools to unlock health care workers’ ability to effectively respond to this disease.
    ◦ Accurate rapid diagnostic tests for malaria don’t achieve their intended effect if they aren’t available and accessible to communities that need them, or if they aren’t as effective in identifying asymptomatic cases.
• Malaria is too complex and dynamic of a disease for any one tool to defeat it on its own. At the same time, each region, country and community working to fight malaria faces unique challenges complicating its malaria response and requiring a unique combination of interventions.
  o Ending this disease requires a strong, diverse toolbox of innovative tools and approaches used complementarily to strengthen the whole of our fight.
• Innovations to fight malaria are only as effective as the supply chains delivering them, the education programs preparing communities to implement them, the partners across sectors and borders collaborating to advance them, the surveillance and data collection systems tracking them, and the regulatory systems guiding their introduction and use.
  o For our response to be effective, we must encourage innovation from sources in the health sector and beyond – labs and insectaries, engineering and urban planning centers, villages and government chambers, data warehouses and business incubators.
  o We also need new funding mechanisms to make the best use of limited resources and new delivery mechanisms to reach people in greatest need, including migrants and refugees.
• We have saved countless lives and will continue to make progress by evolving the way we work together to research, develop and deliver malaria interventions. To do this, it is essential that we rely on evidence-based strategies to inform when, where and how we use existing tools and introduce new ones, and ensure affected communities are helping to set the innovation agenda.

The longer we take to end malaria, the greater the risk that the parasite and mosquito become better able to fight back, and the higher the financial and human toll.

• As long as malaria exists, it will threaten the most vulnerable communities and will always have the potential to resurge.
• Each step forward in understanding and technological advancement brings us closer to our goal. The investments we make today in R&D, infrastructure and system strengthening will help lay the groundwork for effective introduction in the coming years, and to prepare us to tackle new, unexpected challenges as they emerge.
  o The world’s technological pipeline is promising and poised to meet a broader range of the specific, diverse needs of different communities and regions at risk of malaria than ever before, to help them more effectively combat the disease – e.g., next-generation vaccines, genetic modification approaches, innovative medicines and repellents, etc.

By developing and creating swift access to a suite of proven and transformative innovations, we can defeat the malaria parasite and mosquito vector and equip countries to more effectively deal with other existing and emerging deadly diseases.

• Investing in multiple innovations and new financing models to develop and scale up a mix of transformative tools is critical to protect gains and accelerate progress.
• Our legacy of progress against malaria and the current example of the world’s response to COVID-19 show the potential of concerted global action in health.
  o In the face of a novel threat, we must not lose focus on or financial commitment to a longstanding one: malaria continues to impact more than 200 million people every year.
  o We need the same level of engagement, collaboration and ambition we’re seeing for COVID-19 to end malaria within a generation.