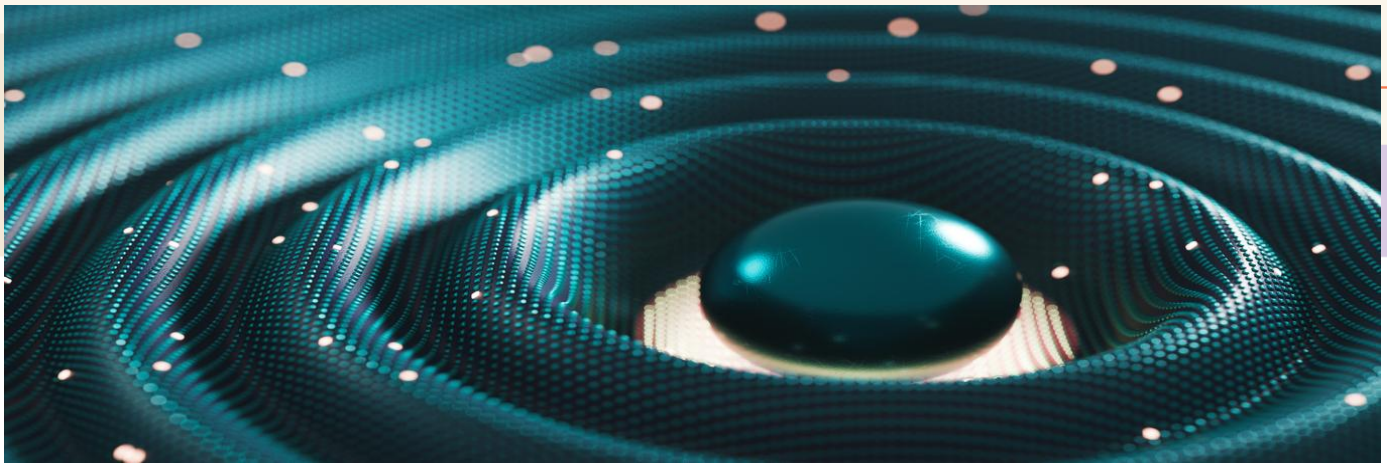
Impact Global Health

The Brief

Published January 20, 2026



The Ripple Effect 2.0: from global health to domestic value

Authors: Impact Global Health

1. CONTEXT

Every breakthrough in global health sends ripples that reach across borders. In an era of fiscal tightening and inward-facing policy priorities, investments in global health R&D are under increasing pressure. Yet these investments are among the most powerful drivers of innovation, economic growth, and resilience, not just for low- and middle-income countries (LMICs), but for high-income countries (HICs) as well.

Research by Impact Global Health showed that $71 billion in global health R&D funding from 2007–2023 catalyzed $511 billion in GDP growth, 643,000 jobs, and 20,000 patents, a multiplier effect proving that global health investment drives domestic prosperity.[1] Beyond the quantified macro-level economic gains of global health R&D, *The Ripple Effect 2.0* moves a step further measuring product-specific health and economic impacts in HICs.

This executive briefing highlights findings from three case studies: the Shingrix shingles vaccine, the JADA System for postpartum haemorrhage and BCG as a treatment for bladder cancer. It provides quantitative, country-specific proof points showing how these selected global health innovations improve health outcomes and deliver economic value across the US, UK, Japan and Europe

1. Impact Global Health. The ripple effect: how global health R&D delivers for everyone. September 2025.

2. KEY FINDINGS AT A GLANCE

Innovations developed for LMICs are being adopted and scaled in HICs

By 2050, the three global health innovations analyzed in *The Ripple Effect 2.0* - Shingrix, the JADA System and BCG for bladder cancer - will together deliver substantial health gains in HICs. Combined, these innovations are projected to save approximately 411,000 lives, avert 33 million cases of disease, and prevent nearly 6 million disability-adjusted life years (DALYs) across the United States, United Kingdom, Japan, and Europe. These impacts reflect not hypothetical spillovers, but concrete, measurable returns from products originally developed with significant investment aimed at global health needs.

These innovations deliver measurable health improvements and economic returns

Selected country-level health impacts illustrate the scale and diversity of these benefits:

- United Kingdom: approximately 16,000 lives saved from bladder cancer using BCG
- European Union: around 17 million cases averted through Shingrix vaccination
- United States: an estimated 597,000 PPH cases effectively controlled using the JADA system
- Japan: approximately 106,000 bladder cancer recurrence cases averted due to BCG treatment

Beyond health outcomes, these innovations generate substantial economic value for high-income health systems and economies. Together, these products are projected generate $91 billion in health-system savings across the United States, United Kingdom, Japan, and Europe. The case studies in *The Ripple Effect 2.0* show that targeted R&D investments can generate durable economic returns, while strengthening innovation ecosystems that underpin future growth.

Investing in global health R&D builds resilience, strengthens innovation pipelines, and safeguards the future

Taken together, these results underscore a consistent and powerful message: investment in global health R&D strengthens scientific networks, accelerates innovation pipelines, and generates downstream benefits that directly improve health outcomes in donor countries. By supporting research initially oriented toward LMIC needs, HICs also expand their own capacity to address ageing populations, chronic disease burdens, and emerging health threats, demonstrating that global health innovation is a strategic investment in shared health and economic resilience.

3. CASE STUDIES

From malaria research to protecting aging population: AS01 Adjuvant in Shingrix

AS01 was developed through global health R&D for malaria vaccines and first deployed in the malaria vaccine RTS,S. During this development process, AS01 was recognised not as a single-use solution, but as a highly flexible immune-enhancing platform capable of eliciting strong and durable immune responses.

This platform capability enabled AS01 to be repurposed and incorporated into Shingrix, a recombinant vaccine for shingles (herpes zoster). Today, Shingrix is widely used across HICs, where shingles represents a growing public health challenge linked to ageing populations. The pathway from malaria to shingles illustrates how investments targeted at LMIC health priorities can generate transferable scientific assets with broad downstream applications.

Health and economic impact in the EU, Japan, UK and USA:

- By 2050, Shingrix is projected to prevent nearly 32 million shingles cases, save 115,000 lives, and avert 1.2 million DALYs across the EU, UK, US, and Japan. The impact is large and highly relevant, driven by ageing populations and the high burden of shingles and its complications.

- Shingrix generates close to $400 billion in societal value from healthy life years gained and $72 billion in health-system cost savings. It is cost-saving in the US, easing long-term pressure on health systems.

Why this matters for policymakers:

AS01 illustrates how investments in global health R&D can create multi-directional spillovers: an innovation originally designed to protect children from malaria now delivers major health and economic benefits for ageing populations in HICs and underpins multiple vaccine platforms.

These findings demonstrate that global health R&D investments can yield returns that extend well beyond humanitarian impact, strengthening the fiscal sustainability and resilience of health systems in donor countries. As populations age and the burden of chronic and age-related conditions rises, platform innovations such as AS01 play a critical role in translating early-stage global health research into long-term domestic value.

From TB prevention to treating cancer: BCG vaccine for bladder cancer

BCG was developed over a century ago through global health research to combat tuberculosis, a disease disproportionately affecting low-income settings. Decades later, researchers realised that BCG's potent immune-stimulating properties also made it a significant improvement over chemotherapy in the treatment of non-muscle-invasive bladder cancer. Today, BCG is a long-standing standard of care in HICs, illustrating how insights from global health R&D can have transformative downstream applications decades later.

Health and economic impact in the EU, Japan, UK and USA:

- By 2050, BCG is projected to prevent nearly 877,000 bladder cancer recurrences, save around 296,000 lives, and avert 4.4 million DALYs across the EU, UK, US, and Japan. This impact is set to grow further over time as ageing populations face increasing risks from bladder cancer.

- The health gains delivered by BCG translate into over $1.5 trillion in societal value, alongside nearly $15 billion in health-system cost savings. BCG is cost-saving in the US and Japan and remains highly cost-effective in Europe and the UK, with ICERs far below typical thresholds.

BCG exemplifies how investments in discoveries made to address neglected diseases can later transform into care for chronic conditions in high-income settings, sometimes decades after their initial development.

Why this matters for policymakers:

BCG demonstrates that early-stage global health research targeting LMIC priorities can yield substantial, long-term returns for ageing populations in donor countries. By preventing cancer recurrences and reducing the burden on health systems, platform innovations such as BCG highlight the enduring, multi-directional value of sustained investment in global health R&D, strengthening both population health and economic resilience.

From targeted solution to global maternal health asset: the JADA System

Decades of global health innovation in postpartum haemorrhage (PPH) – particularly balloon tamponade devices developed for use in low-resource settings – laid the groundwork for newer PPH technologies. Building on this foundation, the JADA System introduced a novel approach to rapidly control uterine bleeding, earning approval from the US FDA in 2020.

Health and economic impact in the US:

- By 2050, JADA is projected to successfully control 597,000 severe PPH cases, save 919 lives, and avert over 20,000 DALYs in the US alone. While only used in a high-need subgroups, its impact on these high-risk patients is transformative, sharply reducing maternal deaths among the most vulnerable populations.

- JADA generates nearly $11 billion in societal value from healthy life years gained, $4.5 billion in health-system cost savings, and $1.2 billion in productivity gains. It is cost saving, with a strongly negative ICER of around $259,000 saved per DALY averted, as avoided complications far outweigh the higher device cost.

JADA exemplifies how global health–driven innovation cycles back to benefit HICs: solutions designed for settings with limited surgical capacity now improve outcomes and equity in high-resource health systems with persistent gaps in maternal care.

Why this matters for policymakers:

The JADA System highlights that investments in global health R&D targeting maternal health can yield substantial domestic benefits. By reducing maternal deaths, averting complications, and saving health-system costs, global health–inspired innovations provide a clear return on investment for HICs while strengthening health equity and system resilience.

4. The research behind the numbers

These three innovations in this briefing were selected through a structured process prioritising: (1) clear evidence of their origin in LMIC-focused research; (2) documented adoption and measurable outcomes in HICs; and (3) availability of robust data for health and economic modelling. Using a mixed-methods approach, *Ripple Effect 2.0* combined desktop research, literature synthesis, and validated modelling techniques to:

- Quantify the health impact of each health innovation in HICs including: lives saved, cases or recurrence averted and decreases in disability-adjusted life years (DALYs).
- Estimate the economic benefit provided by each product in HICs by calculating the societal value of the health gains received by patients, along with an assessment of health system cost savings.
- Approximate the incremental cost-effectiveness ratio for each product.

All models draw on standardised inputs, including epidemiological data, national healthcare cost estimates, etc ensuring replicability across countries and products. Behind each number in the case studies lies a powerful story: how innovation aimed at solving urgent LMIC challenges translated into tools that protect and strengthen health systems worldwide.

For further details on the key modelling assumptions for each case study please see: https://www.impactglobalhealth.org/insights/hubs/the-impact-of-global-health-rd-hub

5. Why it matters and implications for the future of R&D

The evidence demonstrates that investment in global health R&D represents a highly effective use of public resources, generating health, economic, and innovation gains in HICs as well as health and economic gains in LMICs.

The next phase of global health R&D must focus on building resilient, distributed, and inclusive ecosystems. While HICs have historically concentrated R&D infrastructure and expertise, expanding support for LMIC-led research strengthens global preparedness, equity, and shared returns. This includes investments in research infrastructure, workforce development, regulatory systems, and platform technologies that can be adapted across multiple disease areas. Public and philanthropic funders should also leverage blended finance mechanisms to catalyse co-investment from domestic and private sectors, ensuring sustainable funding for long-term innovation pipelines.

Taken together, these findings point to a clear policy imperative: global health R&D is a strategic tool for economic security, health-system sustainability, and scientific leadership. Policymakers in donor countries should maintain and, where possible, expand funding, while fostering partnerships that empower LMIC institutions, amplify innovation, and ensure that the benefits of research are shared equitably across the globe.

6. Calls to action

Now is the time to double down on global health R&D as a shared investment in prosperity, security, and resilience. The evidence from The Ripple Effect 2.0 shows that these investments deliver concrete returns for HICs, while also addressing specific needs in LMICs. Taken together, the findings from *The Ripple Effect 2.0* suggest a clear direction going forward.

Sustain investments and reposition global health R&D as a strategic driver for growth
At a time of fiscal pressure and shifting geopolitical priorities, sustaining investments in global health R&D requires a clearer articulation of its domestic value. The evidence in *The Ripple Effect project* shows that investments originally directed toward global health needs generate measurable health gains, cost savings, and economic value within high-income countries. Positioning global health R&D within broader economic, innovation, and security frameworks can help maintain continuity of investment even as traditional aid narratives come under strain.

Create financing approaches that protect innovation pipelines during transition
With the announced budget cuts, the global health R&D ecosystem is entering a period of heightened fragility. Avoiding long-term losses in innovation capacity will depend on financing approaches that provide predictability across the R&D lifecycle and support platform technologies with demonstrated spillover potential. The product pathways highlighted in *The Ripple Effect 2.0* illustrate how early-stage investments can yield durable returns over decades, reinforcing the case for mechanisms that prioritise continuity and multi-year funding rather than short-term cycles.

Strengthen the enabling conditions for sustainable innovation ecosystems
Long-term returns from global health R&D depend on more than individual products. Economic and health gains are maximised when investments are accompanied by strong regulatory systems, skilled workforces, access to risk capital, and supportive policy environments. As demonstrated by the platform innovations in this report, these enabling conditions increase the likelihood that early research translates into scalable innovations with lasting domestic and global value.

For full data, visuals and methodology, visit: impactglobalhealth.org/ripple-effect