Today we are still without essential tools to combat many diseases and conditions that exact a crushing burden on poor and vulnerable populations worldwide. Or in cases when treatments and tools do exist, they are often too toxic and grueling to constitute quality care or not suited for low-resource communities where skilled health workers or electricity may be scarce. To achieve UHC, we need significant new investment in research and development (R&D) for new drugs, vaccines, diagnostics, and other tools targeted for underserved communities. Here are four ways investing in R&D can transform UHC from bold vision to achievable reality.
**Vaccine innovations**, like oral and heat-stable formulations and single-use syringes, have enabled millions of people in low-resource settings to receive safe, effective vaccinations.

**Easy-to-use, rapid diagnostic tests** are improving diagnosis at the point of care—helping patients in remote locations receive appropriate care more quickly and identifying outbreaks before they become epidemics.

**New gel formulations of the antiseptic chlorhexidine**, designed for use at home by community health workers or family members to apply to the umbilical cord stump after birth to reduce infection risk, are projected to save the lives of over one million infants by 2030.

**Long-acting, injectable antiretroviral treatments** for HIV/AIDS and injectable medicines for malaria prevention which are now in development could increase adherence and provide an alternative to patients who struggle to take frequent pills.

**New child-friendly tuberculosis (TB) and malaria medicines**—which are dissolvable, flavored, and appropriately dosed—have transformed treatment for children. Previously, caregivers had to break up bitter-tasting pills to estimate dosage, creating safety and adherence challenges.

**Recent contraceptive innovations**, including a self-insertable/removeable, one-year vaginal ring and a discreet self-injectable, long-acting form of contraception, are helping more women meet their unique family planning needs by overcoming barriers to use.
Existing treatments against leading global killers like malaria, TB, and HIV/AIDS could become ineffective if drug resistance continues to grow—underscoring the need for R&D of new treatments and other tools.

New shorter treatment regimens under development for drug-resistant TB could reduce treatment costs by up to 90%.

Neglected tropical diseases (NTDs) impact one in seven people worldwide. Yet, preventative vaccines do not exist for 20 of the 21 NTDs prioritized by the World Health Organization, and many existing treatments have toxic side effects.

Current treatments for TB—a disease that affects one quarter of the world’s population—require 6 months to 2 years of taking thousands of pills that are sometimes ineffective against drug-resistant strains. New shorter, simpler treatment regimens are needed.

Ensuring Quality Care

A US$26 million investment in polio vaccine R&D in the 1950s has saved $180 billion in treatment costs in the United States alone.

Vaccine vial monitoring devices, which monitor the temperature of vaccines to ensure efficacy, have saved immunization programs $140 million in wasted vaccines over the past decade.

New shorter treatment regimens under development for drug-resistant TB could reduce treatment costs by up to 90%.

Generating Cost Savings

New interventions can drive more efficient use of resources and generate health system cost savings.
The Global Health Technologies Coalition (GHTC) works to save and improve lives by encouraging the research and development of essential health technologies. We bring together more than 30 nonprofit organizations, academic institutions, and aligned businesses to advance policies to accelerate the creation of new drugs, vaccines, diagnostics, and other tools that bring healthy lives within reach for all people.