

Expanding Project ECHO in Low- and Middle-Income Countries: A Window to Reduce Health Disparities and Build Gender Equity

Project ECHO seeks to establish a lasting infrastructure for sharing critical medical knowledge by building the capacity of health care workers throughout low- and middle-income countries (LMICs) so they can treat all patients effectively in the places where they live.

We believe that now is the moment to achieve this goal. The COVID-19 pandemic has underscored global inequities in the distribution of medical knowledge and expertise and in access to quality health care for millions in rural and underserved communities—especially for women and children, who disproportionately face inequities in access to care. LMICs need a new solution for training and supporting local health care workers to provide essential health services and specialized care and to be fully prepared for emerging local and global health crises.

Project ECHO is that solution. We have built a strong presence in Africa, India, Latin America and the Asia Pacific region, supporting local partners in their use of the ECHO Model for training and telementoring health providers. We now have the opportunity to leverage our global network of partners to create lasting, systemic change that reduces inequities and improves the lives of millions.

"There's got to be a way to think about health care as a human right that is connected to a mechanism that works. ECHO is that. It's a tremendously powerful way to extend the best care to everyone, to absolutely everyone, to leave nobody out. It makes health care as a human right be real."

- Don Berwick, Former Administrator, Centers for Medicare and Medicaid Improvement, healthcare improvement. Stanford Social Innovation Review, Winter 2021





Meeting the Need for Local Medical Expertise in Lowand Middle-Income Countries

Every year, millions of people around the world die of diseases that are preventable, treatable, and curable because health care providers in their communities don't have the knowledge and expertise to address their conditions.

Due to the COVID-19 pandemic, these health disparities have worsened. Decades of progress in improving global health and well-being have been reversed. And disparities in access to health care for LMICs are exacerbating long-standing inequities in maternal and child health, non-communicable diseases, infectious diseases and mental health.

Project ECHO is a low-cost, scalable solution that increases the capacity of health workers in rural and underserved communities to provide best-practice care to their patients. A recent study from CDC Kenya concluded that training one clinician through ECHO costs approximately \$27 dollars. In person, the same training can cost more than \$800.

ECHO connects hundreds of partners worldwide—governments, academic medical centers, professional associations, NGOs—and enables them to train and telementor hundreds of thousands of health care providers in virtual communities of practice where all teach and all learn.

How Project ECHO Works

Project ECHO uses a hub-and-spoke model that leverages simple videoconferencing technology to connect teams of experts with local providers for ongoing case-based learning and mentoring sessions.

experts and local providers learn from one another, as expert knowledge is refined and tested by local experience. This ensures relevance to local contexts, amplifies the voices of community providers, and drives collaborative solutions for local health priorities. Nurses, midwives, doctors, and community health workers get the knowledge and support they need to treat dozens of diseases and health conditions.







Four Principles of the ECHO Model



Use technology to leverage scarce resources



Share best practices to reduce disparities



Apply case-based learning to master complexity



Evaluate and monitor outcomes

"From my work in India, I am aware of the utility of the ECHO model and believe it has both credibility and unparalleled potential for impact and scale to address health problems in the developing world."

 Dr. Soumya Swaminathan, World Health Organization (WHO) - Chief Scientist

Expansion in Low- and Middle-Income Countries

As the world continues to build back and strengthen health systems in the wake of the COVID-19 pandemic, demand for Project ECHO in LMICs is high.

In Africa, ECHO initially launched to support the Namibian Ministry of Health with their HIV programs. These programs scaled up to meet the demands of COVID-19 and now, ECHO programs are run across the continent in areas such as cancer screening and treatment, maternal and child health and emergency preparedness and response, in addition to HIV. As of year-end 2022, our partners are part of or have a close relationship with Ministries of Health in 14 African countries.

The Indian national government and 24 of 28 Indian states have signed memoranda of understanding with Project ECHO, mandating use of the ECHO Model across their health care systems. ECHO programs are upskilling health care professionals and building capacity of front-line health workers to strengthen India's health care system and combat diseases before they become a burden. Programs address issues from tuberculosis, pneumonia and diabetes to hypertension and mental health.

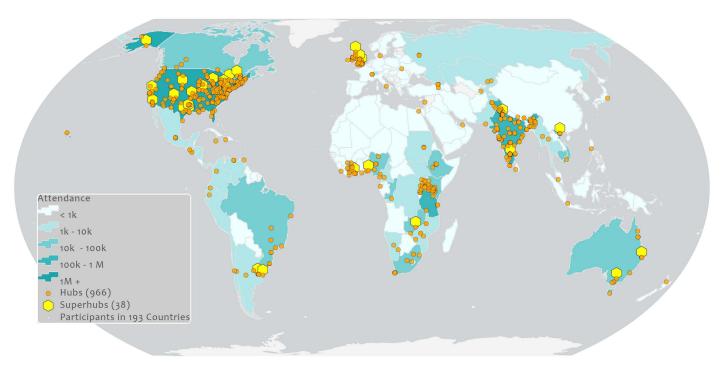
The first ECHO programs in Latin America began in Uruguay in 2014. Today, ECHO is working with Ministries of Health, multinational organizations and private health systems throughout Central and South America to address the extreme social and health disparities in the region. Programs address challenges ranging from TB and diabetes to ongoing support for COVID-19 support in the region.

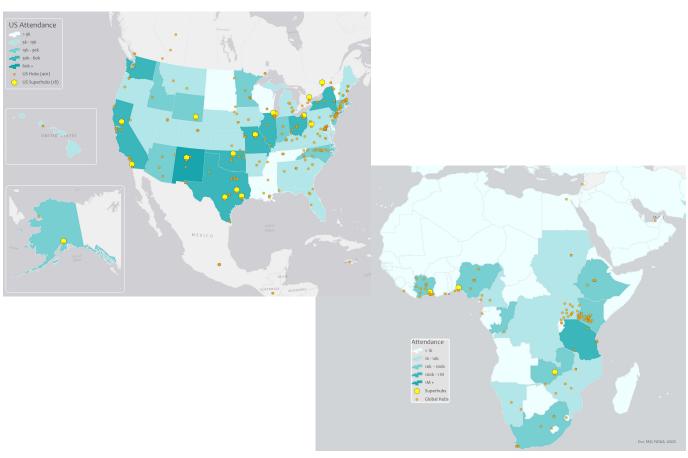
In the Asia-Pacific region, ECHO initially launched programs in Vietnam to support cancer. ECHO now operates in partnership with Ministries of Health, multinational organizations, government and private health systems, and NGOs to spread best practices and connect some of the most impoverished and rural regions to expertise in conditions ranging from maternal and child health and hypertension, to COVID-19 and other infectious diseases.





ECHO Reach





Now is the time to scale ECHO's capacity to meet this demand by:

- ➤ Supporting partners as they work to meet UN Sustainable Development Goals, including the reduction of premature deaths from NCDs by 2030.
- ➤ Expanding and strengthening our partner networks to provide better essential health services, eradicate common killers like cancer, HIV, and hepatitis C, and prepare to respond to future pandemics—all with a focus on building equity and raising the standards of maternal and child health around the globe.
- Sustaining our partners for the long term by building evidence for ECHO's impact in LMICs and engaging advocates and policymakers to catalyze governments' support of their ECHO programs.

Project ECHO was founded at The University of New Mexico (UNM) in 2003 to address disparities in hepatitis C care across the state's rural and remote communities. The success of that initial ECHO program led academic and other medical centers around the world to adopt the ECHO Model, creating ECHO hubs for their own local health challenges and priorities.

These ECHO hub partners are initially trained and supported by Project ECHO at no cost. Through philanthropic partnerships and government funding, Project ECHO provides hubs with in-person and virtual training on the ECHO Model, Zoom software licenses, and ongoing technical assistance and support as they launch their ECHO programs.

ECHO also provides a robust digital infrastructure for sharing curricula and other program materials and for program measurement, evaluation, and learning. With iECHO, our proprietary digital platform, isolated providers can easily participate in ECHO programs, and partners can easily track, measure, evaluate, and improve those programs.

ECHO partners with most major universities in the countries we serve, and with governments in Africa, India, Latin America and Asia Pacific, to expand the use of the ECHO Model for region-and country-specific health priorities. In virtually every LMIC where we have trained and supported partners through initial philanthropic partnerships, governments and educational institutions have assumed support for those programs, ensuring funding and long-term sustainability.

Most important, ECHO partners work with each other in a worldwide network committed to our shared vision of ending health and other disparities for all. Since 2020, ECHO has logged more than 4 million attendances, representing over 1 million health care providers that likely impacted the lives of over 50 million people.





IMPACT

Catalyzing Hepatitis C Elimination in Punjab

Through its partnership with Project ECHO, the Indian state of Punjab has made dramatic progress in its fight against hepatitis C. When Punjab created a public health program in 2016 to provide free hepatitis C care for all residents, over 600,000 people needed treatment. Infection rates in some parts of the state were more than five times India's average rate of 2.9%.

To carry out this new program, doctors at all of Punjab's district hospitals needed to be trained and guided in the administration of hepatitis C treatment. Punjab's government partnered with Project ECHO to create a network of 22 district hospitals and three government medical colleges, through which doctors were trained and telementored in best-practice hepatitis C protocols.

Two years after Punjab launched its ECHO hepatitis C network, participating doctors had treated 48,088 patients, with a cure rate of 91.6%. The program continues: as of 2020, participating doctors have treated 88,000 patients.



IMPACT

Building Gender Equity in Cameroon

Like other African countries, conflict-torn
Cameroon has a physician shortage. As a result,
few physicians have the time or expertise to do
cervical screenings, but nurses are highly skilled
and allowed to perform certain procedures which
are reserved for doctors in the United States and
other western countries.

Using a nurse-led approach, the Women's Health Program offers affordable preventive services and has forged strong relationships with local communities.

Working with community health workers and other partners, nurses trained and mentored through ECHO have organized several successful cervical screenings and vaccination clinics. In one village where they expected 40 to 50 women to show up for screening, they got about 500. For an HPV vaccination clinic that involved an extensive public education campaign, they achieved an 83% threedose completion rate for 6,300 girls. In another village, nurses held an event where they screened 400 women, treated pre-cancerous lesions, and took biopsies. They even identified one person with invasive cancer who was treated successfully.

To date, providers from 10 other African countries have joined the ECHO sessions as well. The Cameroon Cervical Cancer Prevention ECHO could serve as a model for addressing cervical and other cancers across the <u>African continent</u>.

A campaign for cervical cancer screening organized by the Women'sHealth Program of the CBCHS in a rural village of Cameroon. (Int. J Gynecol Cancer November 2019 Vol 29 No 9)





IMPACT

Getting STD/AIDS Treatment to Brazil's Favelas

In Brazil, the STD/AIDS Specialized Municipal Network of the city of São Paulo includes primary care professionals, nurses, dentists, pharmacists from 10 testing and counseling centers and 17 STD-AIDS Specialized Care Service clinics, in addition to 38 PEP and PrEp training units, who participate in ECHO sessions on syphilis with primary care, HIV/AIDS, and other topics. This network also operates mobile street clinics that take treatment directly on the street, draw blood and give medicine to the trans population, men who have sex with men, and people on the street, creating more equitable access to health care in marginalized communities.

Strengthening Health Systems

Imagine full integration of the COVID-19 vaccine into routine immunization schedules across the African continent. Immediate and effective response to an Ebola outbreak in the Democratic Republic of the Congo. Cervical Cancer Screenings and HPV immunization for every woman in Cameroon.

Greater access to depression diagnosis and care in highprevalence Indian states like Tamil Nadu. Or rapid national implementation of strategies to close the tuberculosis treatment gap caused by COVID-19 lockdowns that's affecting millions of people in India.

Realizing our vision will significantly expand Project ECHO's network of self-sustaining partners and empower health care providers to bring best-practice care to underserved communities in LMICs. It will also empower women and children to lead healthier, more productive lives.

In the longer term, ECHO will establish an infrastructure for more equitable and resilient health systems in these regions, bringing us that much closer to achieving our goal of eliminating health care disparities around the world.



"In 2016, a diagnosed person took 180 days to start treatment, today the average is 14 to 6 days. São Paulo, because it is a big city, has a very large commute, and so this online training [makes it] possible to have a success with an average access in the clinics of 180 to 200 connected points."

> - Dr. Robinson Fernandes de Camargo, Coordinator of ECHO programs in STD- HIV/AIDS in the Municipal Secretary of Health in São Paulo, Brazil

Join us today.

We are changing the world, with a goal of touching 1 billion lives by 2025.



