

Addressing Climate Change through the Largest Digital Network of Pharmacy Professionals in southeast Asia



Climate change threatens access to the most basic health requirements: clean air, safe water, sufficient nutrition and healthcare.¹ Rising temperatures, risks of floods and air pollution pose immense challenges to ongoing efforts to address infectious, water and vector-borne diseases and ensure access to reproductive health services.² Climate change disproportionately affects women and girls and increases maternal and child health risks.³ To address these challenges, the World Health Organization calls for increased efforts to strengthen climate-resilient health systems and promote lower-carbon health communities, in alignment with primary health care (PHC) and universal health coverage (UHC) goals.⁴

Community pharmacies are a critical piece of national health systems and serve as primary health providers for many people in southeast Asia.⁵ Reducing carbon emissions generated through manufacturing and distribution of medicine is also key to improving climate resilience.⁶ This brief describes how SwipeRx uses technology to scale improvements in pharmacy capacity and improve energy efficient operations at the pharmacy for more climate-resilient health systems.



By connecting over 300,000 pharmacy professionals and students across six countries in southeast Asia—more than two-thirds of whom are women—SwipeRx reaches millions of clients each month, generating billions of data points that enable faster, more scalable health and climate change solutions.

How SwipeRx creates greener pharmacy supply chains

SwipeRx is innovating to reduce carbon emissions associated with the storage, procurement, distribution of medicine and other health products offered by community pharmacies in Indonesia by:



Digitizing pharmacy procurement and distribution to reduce excessive paper and fuel use.



Reusing packing materials from pharmaceutical suppliers to lower waste generated through packing & distribution.



Using electric motorcycles to deliver health products to pharmacies with reduced carbon emissions.



Creating energy efficient warehouses by optimizing air conditioning systems and installing LED lighting to reduce electricity use.

¹IPCC, 2022: Summary for Policymakers. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability*.

²Climate Change Impacts on Human Health and the Health Sector. USAID, 2022.

³The Link between Climate Change and Sexual and Reproductive Health (SRH). Women Deliver, 2021.

⁴WHO General Programme of Work 2025–2028: climate change and health.

⁵Mosadeghrad, A.M., et al. Strategies to strengthen a climate-resilient health system: a scoping review, 2023.

⁶Daughton, C. Pharmaceuticals and the Environment (PIE): Evolution and impact of the published literature revealed by bibliometric analysis, 2016.

How SwipeRx equips community pharmacies to address climate-sensitive health issues

SwipeRx leverages technology to improve pharmacy access to affordable, quality health products needed by communities vulnerable to climate change including iron folic acid, oral rehydration salts, contraceptives, numerous rapid diagnostic tests and essential medicine. Recent results include:

- **Increasing Couple Years of Protection (CYP)** generated through SwipeRx distribution of five contraceptive methods by 41% in the last year in Indonesia.
- **Lowering the cost of medicine** procured by pharmacies using SwipeRx in Indonesia by 9% compared to alternative suppliers,
- **Increasing access to quality diagnostics at pharmacies.** SwipeRx-trained pharmacies in Vietnam were three times more likely to stock quality-assured self-tests for COVID-19 compared to non-trained pharmacies.
- **Building capacity to address infectious diseases.** 23,619 pharmacy professionals have been educated about 1 or more infectious disease topics through SwipeRx accredited online training courses in the last 5 years.

How SwipeRx links community pharmacies with national health systems

- **Pioneering e-referral systems** in three countries, making it easier for pharmacists to screen and refer clients with TB or STI symptoms to a health facility. In Cambodia, 49% of pharmacies trained to use the SwipeRx e-referral tool successfully identified clients with TB, HIV, other STIs last year.
- **Enhancing national data systems** by enabling governments to efficiently collect data from pharmacies. Through SwipeRx, the World Health Organization collected antibiotic consumption data from pharmacies in three countries in eight weeks.
- **Trialing innovative service delivery models** to support task shifting goals and relieve overburdened public sector health facilities.



Future Opportunities

Contact us to discuss partnerships to improve:

- **Sustainable pharmacy infrastructure** including solar panels, LED lighting, and energy-efficient cooling systems.
- **Access to rapid diagnostics and other health products** needed for climate-resilient communities.
- **AMR and one health surveillance systems** including community pharmacy data.
- **Pharmacy scope**, including linkages with national social insurance schemes, to support UHC goals.