





Launching of the Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/1568/2024

SMILE Feature in SATUSEHAT Platform

To strengthen the national health supply chain, SMILE is designated as part of the SATUSEHAT (ONEHEALTH) digital platform. SMILE will enable a more coordinated, accurate, and transparent health supply distribution monitoring throughout Indonesia.

n September 20, 2024, the Minister of Health issued Decree Number HK.01.07/ MENKES/ 1568/2024. This decree establishes the electronic health logistics inventory monitoring system called SMILE as a feature in SATUSEHAT, the national digital health ecosystem platform.

Initially, SMILE was developed as an Electronic Immunization and Logistics Monitoring System to monitor logistics in immunization programs. Along with the growing needs, this system was transformed into an Electronic Health Logistics Inventory Monitoring System.

The integration of SMILE in SATUSEHAT enables a more coordinated, real-time, and transparent health supply chain monitoring, imrpoving distribution efficiency and accuracy throughout Indonesia.



As a feature in SATUSEHAT, SMILE covers important stages, namely planning, ordering, distribution, usage, control, and destruction of health supplies. With the data obtained through this system, policy makers can plan and respond to public health needs quickly and appropriately.

This Decree aims to address challenges in supply chain management, including unequal distribution and the risks of shortages or excess supply. SMILE is expected to improve health supply availability and distribution throughout Indonesia and ensure a more efficient use of resources. In addition, SMILE is expected to increase the transparency and accountability of health logistics management to minimize potential misuse and deviation. The implementation of SMILE is coordinated by the Directorate General of Pharmaceuticals and Medical Devices. Its implementation involves the central government, regions, and health offices at the provincial and district/city levels. The Ministry of Health will provide guidance and supervision for the implementation of this system.

SMILE's operational funding comes from the State Budget (APBN), Regional Budget (APBD), and other legitimate funding sources in accordance with laws and regulations. SMILE will be used by various health service facilities, including hospitals, community health centers, and other facilities.

With the presence of SMILE on the SATUSEHAT platform, the Ministry of Health hopes to create a more equitable, efficient, and accountable supply chain for health supplies throughout Indonesia. SMILE is also expected to improve the quality of healthcare services to meet public health needs. Through centralized monitoring, every health supply distribution process can be reported in real-time, providing a clear picture of the availability and distribution of health logistics throughout Indonesia. •

SMILE: A Digital Solution for an Efficient National Health Logistics Management

The Electronic Health Inventory and Logistics Monitoring System (SMILE) was initially developed to support vaccine distribution and logistics in routine immunization programs. As a digital solution, SMILE streamlines the health logistics system to ensure the availability and equitable distribution of vaccines and medicines throughout Indonesia.

The success of this system was evident during the COVID-19 pandemic, when SMILE facilitated the rapid distribution of hundreds of millions of vaccine doses to various regions, strengthening efforts to address the health crisis.

In addition to immunization, SMILE is also used for the rabies program, which began as a pilot project in East Nusa Tenggara (NTT) in March 2024, before being expanded throughout Indonesia since August 2024.

Currently, SMILE manages more than 800 million vaccine doses and 100 million drug doses in more than 10,000 healthcare facilities across 38 provinces in Indonesia. The system now covers a range of other health commodities, including for tuberculosis, HIV, malaria, rabies, and medical waste management.

In 2022, an economic study of SMILE showed a significant economic impact. With an investment of US\$ 20 million, the system generated a return of nearly \$ 60 million, or 2.77 times the initial investment for the immunization program. SMILE also prevents potential losses due to temperature fluctuations of up to \$ 32,600 per month in each healthcare facility, underscoring the importance of accurate supply chain monitoring. The study also provides guidance for the digital transformation of other health programs, with financing involving local and state budgets. SMILE has been shown to improve cost-efficiency in health management, including in AIDS, tuberculosis, malaria, and medical waste management programs.

SMILE is now a national health logistics management model that has a positive impact not only on the health sector, but also the economy, by increasing efficiency and accountability at various levels of government.



Manages vaccine and drug inventory accurately



Assists vaccine and drug distribution to remote areas



Records vaccine and drug storage data



Monitors vaccine and drug storage temperature



Prepares periodic reports automatically

SMILE for Routine

Expanded to 337 community health centers in DKI Jakarta.

SMILE for Vaccine Quality Monitoring MARCH 2021

714 remote temperature loggers installed in various healthcare services.

SMILE for Routine Immunization

provinces.

MARCH – AUGUST 2022 Implemented in 12,000 healthcare facilities in 514 districts in 34

SMILE for Accountability AUGUST 2022

Supported the Ministry of Health to record the disposal of unused/ expired COVID-19 vaccines; the report was submitted to the Audit Board and the Anti-Corruption Commission.

SMILE for Medical Waste Management

JULY 2023
Use of ME-SMILE
expanded to 32
major hospitals +
1 Puskesmas in 4
provinces.

SMILE for Rabies AUGUST 2024

SMILE trials in NTT and Bali in March 2024 have been expanded and used by all 10,000 *Puskesmas* and more than 200 rabies center hospitals.

2018

SMILE for Routine

2019

Immunization
JUNE 2018
Pilot project in

Pilot project in 54 community health centers (South Tangerang and Bogor).

2021

SMILE for COVID-19 JANUARY -

MARCH 2021

Recording 428 million vaccine doses (2021 – August 2022); implemented in 12,000 healthcare services).

SMILE for Accountability NOVEMBER 2021

The Inspectorate General of the Ministry of Health uses SMILE as its audit working paper for health offices/services.



2022

SMILE in Indonesian Digital Health DECEMBER 2021

Minister of Health signed the 2024 Digital Health Transformation blueprint as a formalization of the health digital transformation in the immunization program with SMILE as one of the innovations starting in 2022.

SMILE for Medical Waste Management JULY - AUGUST 2022

Trial of the IoT-based ME-SMILE application in two hospitals (Yogyakarta and Jakarta) and one community health center in Jakarta.

2023

SMILE for Medical Commodities and Laboratories MAY 2023

The Vector Disease Program, as an example of SMILE expansion to non-vaccine material supply chain management, will be implemented in 28 malaria-endemic areas.

2024

SMILE for Rabies JANUARY 2024

More than 5,000 vaccine storage refrigerators (30%) have been equipped with remote temperature loggers connected to SMILE.

Future Plan

- SMILE will cover 10,000 community health centers and 2,000 hospitals across Indonesia for all programs, including essential medicines and JKN.
- ME-SMILE will be expanded to all healthcare facilities by December 2025.
- In addition to the existing 5,000 devices, 2,000 remote temperature loggers will be installed by January 2025, with a remaining 60 percent of vaccine storage refrigerators to be equipped with this device.

SMILEstones 2018–2024



An Important Pillar in Achieving SDGs in the **Health Sector**

hrough its integration with the SATUSEHAT platform, SMILE plays a vital role in supporting the achievement of various sustainable development goals (SDGs). This system not only ensures a more efficient and transparent distribution of health supplies, but also contributes to responsible medical waste management, gender equality, and strengthening global collaboration in the health sector.



SMILE ensures affordable healthcare for alldistributing vaccines, medicines, and other health supplies evenly across Indonesia.

The use of SMILE prioritizes the needs of vulnerable groups, including women, children, the elderly, people with disabilities, and communities in disadvantaged regions.

The integration of SMILE into SATUSEHAT strengthens the national health data infrastructure, enabling more precise planning and preventing waste.











CLIMATE



SMILE also manages medical waste in a more accountable and transparent manner, supporting sustainable waste management.

Medical waste management through SMILE contributes to climate change adaptation, helping to improve the quality of the environment.

SMILE strengthens international collaboration through the exchange of digital solutions, supporting South-South Cooperation in accelerating the achievement of SDGs, especially in the health sector.







