

GOVTECH · PUBLIC HEALTH · AWS CLOUD

A National Health Registry, Built for a Nation

How Sidhyati delivered a country-scale public health platform for a government-backed healthcare organization in Southeast Asia, combining a 160+ question citizen survey, cloud-native infrastructure on AWS, and mobile apps for field agents.

160+

Survey questions per citizen

Nation-wide

Health monitoring & campaigns

Cloud

Scalable AWS infrastructure

OVERVIEW

The National Health Registry (NHR) is a pioneering initiative by a government-backed healthcare organization in Southeast Asia, created to strengthen public health monitoring and management. It conducts a detailed citizen health survey of 160+ questions, calculates health risks, initiates health-check programs, maintains a doctor database, recommends the nearest doctor for treatment, generates management reports, integrates with the organization's internal HIS, and fetches records from the government EHR system. This case study details how Sidhyati delivered it, cloud-native on AWS with mobile tooling for field agents.

THE CHALLENGE

The country lacked a sophisticated system to gather, analyze, and present the healthcare information of its citizens at scale.

Key issues spanned comprehensive data collection from citizens, reliable health-risk calculation, timely healthcare access, seamless integration with HIS and EHR systems, and actionable management reporting.

OUR APPROACH

We architected a cloud-native platform on AWS, engineered to scale elastically with nation-wide survey volume while keeping citizen data secure and available.

Purpose-built mobile apps put the 160+ question survey in the hands of field agents, working reliably even offline in remote areas and syncing to the cloud once connectivity returned.

FIELD → AWS CLOUD Mobile-first capture on a cloud-native backbone

01

Field Capture

Offline-capable mobile apps for field agents

02

AWS Ingest

Secure APIs sync surveys to the cloud

03

Risk Engine

Scales elastically to score every citizen

04

Integrate

HIS & government EHR connectivity

THE SOLUTION

Sidhyati designed a sophisticated application deployed on AWS, pairing a mobile field-survey experience with a scalable cloud backend that handles risk scoring, doctor recommendation, and system integration across the country.

Detailed health survey

160+ questions with business logic, delivered on mobile.

Advanced risk assessment

Cloud engine scores individual health risk.

Doctor database & recommendations

Recommends the nearest qualified doctor.

HIS & EHR integration

Retrieves records from the government EHR.

Management reports

Detailed reporting for strategic decisions.

AWS cloud foundation

Elastic, secure, highly available infrastructure.

THE IMPACT

→ **Enhanced monitoring:** improved public health monitoring and risk assessment nation-wide.

→ **Healthcare access:** timely interventions by recommending nearby doctors.

→ **Data-driven decisions:** detailed reports for strategic management.

→ **Efficient integration:** seamless HIS and EHR integration, enriching data.

→ **Proactive campaigns:** launched nation-wide preventive care and early-treatment programs.

→ **Cloud scale:** AWS foundation absorbs demand spikes without service disruption.