



Quality

Equity

Sustainability

DIGITAL HEALTH SYSTEM IN INDONESIA INDONESIAN M.O.H. SLIDES

**DR dr HANNY ROSULISTYO, OBS.GYN, FISQUA
PRESIDENT ELECT OF ASQUA
EKO SULISTYO MOH**

CV DR dr HANNY,OG,FISQUA



BORN, HOLLAND, HAARLEM, 26 SEPTEMBER 1953
MARRIED TO DR DR INA ROSALINA , Paed, FISQua
3 Children and 5 GRAND CHILDREN

PRESIDENT ELECT ASQUA 2025-2027
BOARD MEMBER ASQUA
BOARD MEMBER IHF
BOARD MEMBER AHF
LATE BOARD MEMBER ISQUA 2022-2025

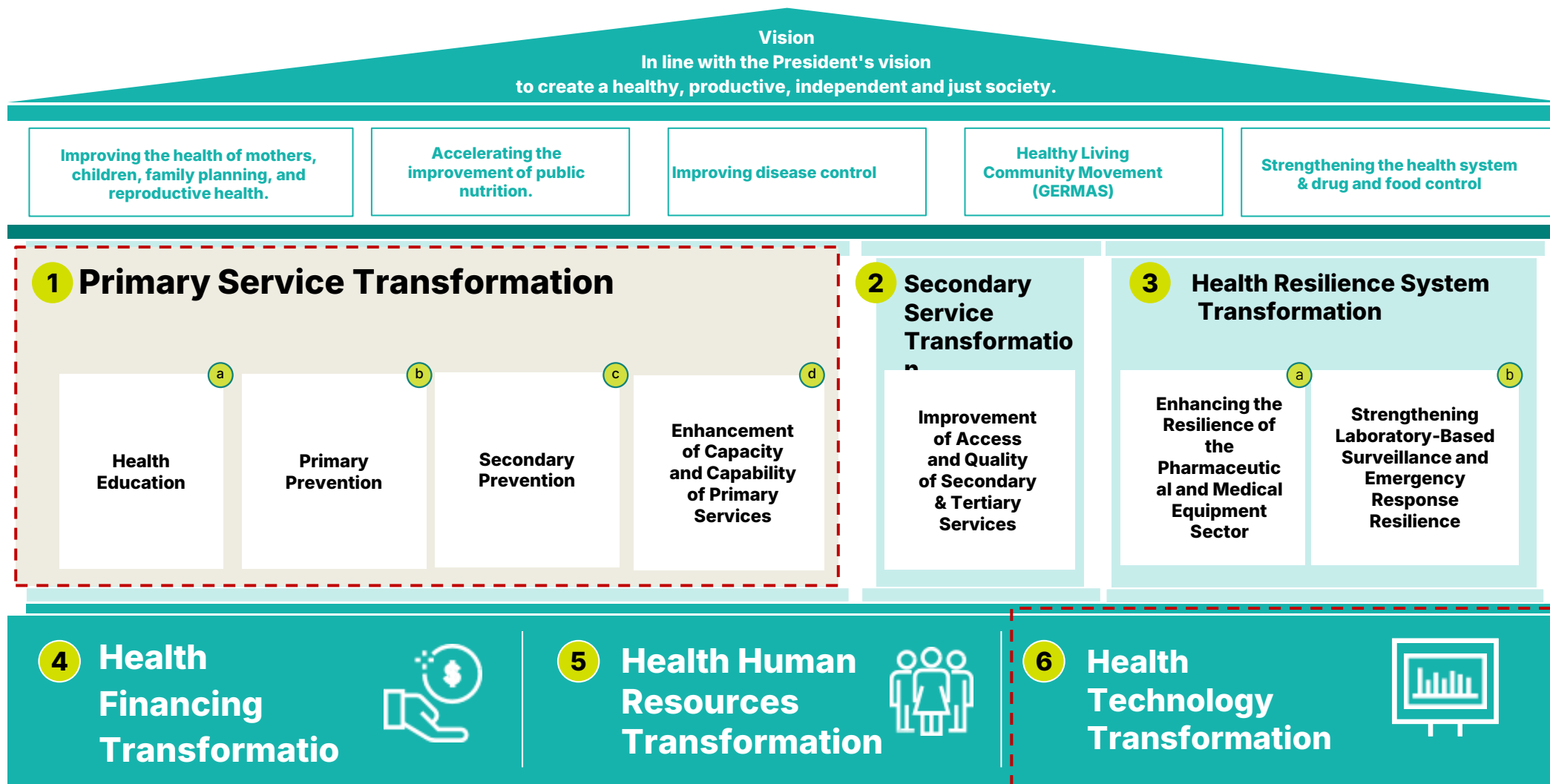


KARS INDONESIAN COMMITTEE OF ACCREDITATION ON HOSPITAL ,
FOREIGN AFFAIRS AND INTERNATIONAL ACCREDITATION
PATIENT CENTRED CARE INSTITUTE PRESIDENT
PERSI , INDONESIA HOSPITAL ASSOCIATION,
INTERDEPARTMENTAL RELATION DIVISION



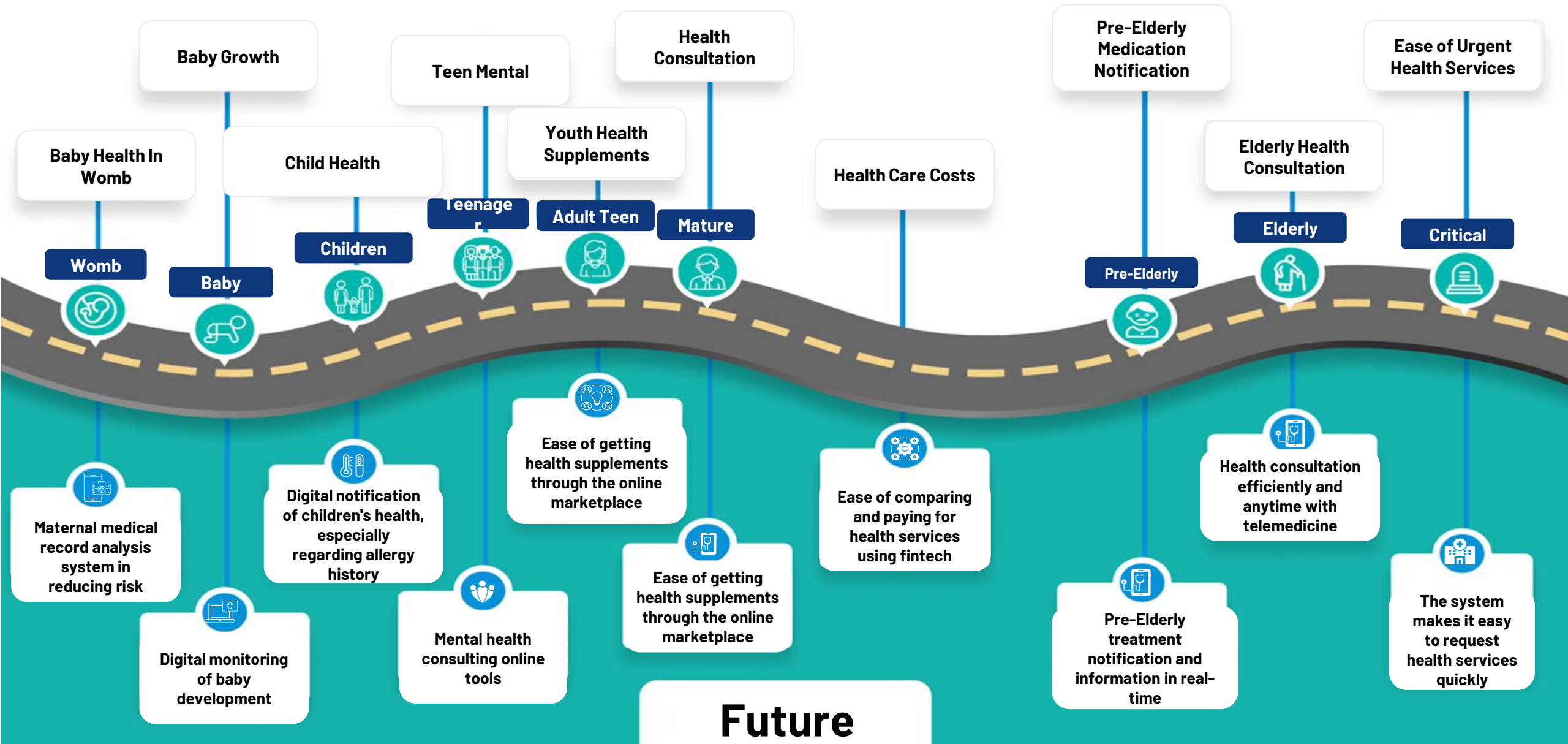
Commitment Transformation of National Health System

Technology Pillar as a Crucial Aspect Supporting the Transformation of Healthcare Services





Aspirations for Healthcare Technology Transformation



Gradual Transformation of Health Services in Indonesia

30-12-2024

No EMR

Partially EMR

233 Million

Total Patient Visits during 2021

A system that is less efficient and optimal causes the patient visiting experience to be less than satisfactory.

Source: Katadata, Internal Research

400+

Number of health SIs at the Central and Regional levels

The public must access various different portals to obtain information on national and regional health data.

IDR 2 Billion

Costs incurred each year for paper costs

The challenge of digital transformation also comes from medical records which are still manual and have to be printed, thus consuming quite a large amount of funds and storage that requires extra care.



Regulations

1. Accelerating Digital Transformation and Integration of National Digital Services
2. Personal Data Protection

National Commitment



Ministry of Health Indonesia

Digital Health Transformation Strategy (DHTS) 1.0 :

1. SATUSEHAT Platform for Integration Health System and Health Data Standardization
2. Simplification of Health Applications
3. Enhancement of Health Technology Ecosystems

Transformation in MOH

Regulations

1. All health facilities are required to implement EMR
2. AI Regulation for Health



Ministry of Communication and Digital Affairs

Infrastructure

Internet Access Provider

Regulations

AI and Electronic System Maintenance (PSE)

Collaboration



Social Security Agency on Health (BPJS) STRANAS PK

Corruption Eradication Commission (KPK)

EMR for Insurance Verification

A strong collaboration with BPJS and KPK in the utilization of EMR for verification of National Health Insurance (JKN) claims serves as a reference point to enhance accountability in combating corruption in Indonesia

Collaboration



SATUSEHAT Platform

Achievement: 42%

>47K

Health Facilities
EMR Implemented

>35K

Connected with
SATUSEHAT

BGSI

(Biomedical and
Genome Science
Initiative)

10
9 Disease Targets
HWGS

1
Biobank Sentral

9
Biobank
Hubs

9
Genomic Sequencing
Facility



Regulatory
Sandbox

Telehealth Cluster

Telemedicine Cluster
(15 Participants in
Digital Health
Innovation:
8 Built, 5 Supervised,
2 Stop Operation)

Sky Ventures

A

KLING SEHAT

Good Doctor

riliv

naluri

apotek dan klinik
simas sehat

halodoc

Lifepack

sehati

cexup

sirka

getwell

SehatQ

SATUSEHAT

Connecting and empowering the entire health system ecosystem and users (society)

Health Master Data



Pharmacy and Medical Devices Dictionary



Funding Master Data



Service Master Data



Patient Master Data



Facility Master Data



Health Worker Master Data

Health Data Standardisation

ICD-10

Diagnosis

ICD-9-CM

Medical Procedures and Actions

SNOMED-CT

Terminology

KFA

Drug Nomenclature

LOINC

Laboratory, Radiology, and Examination

DICOM

Health Digital Imaging

Health Facilities

10K+ Puskesmas	18K+ Clinic	28K+ Private Practitioners
~3K Hospitals	1,4K Laboratorium	17K+ Apothecaries

Cadres-Health Workers Out-Building Record (ASIK & WhatsApp)

Health Industries

100+ Health Systems

Laboratoriums	Biotech
Insurance Companies	Health-Tech/Startup

Data Source

Integration dan Standardisation (FHIR HL7)

SINAR, SIMAR, SINAF

Integration dan Standardisation (FHIR HL7)

Data Utilisation

SATUSEHAT Platform (Health Information Services)

**SATU SEHAT SDMK
SATU SEHAT INDONESIAKU**

Society

SATUSEHAT Mobile

- Personal Health Record
- Health Promotion
- Integration of Wearable Devices

Government

SATUSEHAT Data

To assist the government in establishing evidence-based health policy

Health Facilities

Electronic Medical Record Portal

Access to patient EMR data can only be done through the Medical Record Portal.

Regulations

Law No. 27 of 2022 on Personal Data Protection

Law No. 12 of 2023 on Health

Law No. 23 of 2014 on Regional Government

Government Regulation No. 46 of 2014 on Health Information System

Presidential Decree No. 95 of 2018 on Electronic-Based Government System (SPBE)

Presidential Decree No. 39 of 2019 on Satu Data (One Data) Indonesia

MoH Regulation on Medical Record

MoH Regulation on One Data Health

MoH Decree on SPBE and Health Digital Transformation

MoH Decree on EMR Standard Data

SATUSEHAT achievement

Data as of September 15, 2025



38.288

Integrated health facilities
into SATUSEHAT



61 million+
Patients

Integrated SATUSEHAT



1.8 million+

Lifetime STR is issued for medical
personnel



56

Analytical dashboard with 879 thousand data
accesses to support decision making



45.457

Digital learning activities for developing healthcare
worker competencies

SATUSEHAT for the People and Medical Workers

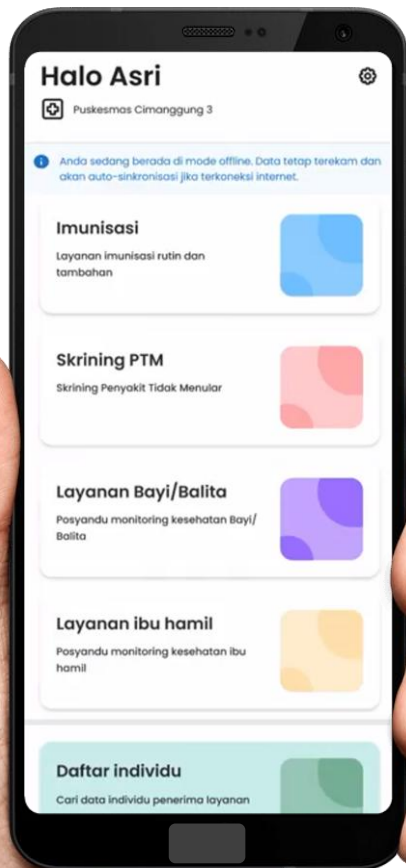
1 No more manual input for out-building record

2 The people receives the input results via WhatsAoo notifications

3 People use SATUSEHAT Mobile as a Personal Health Record



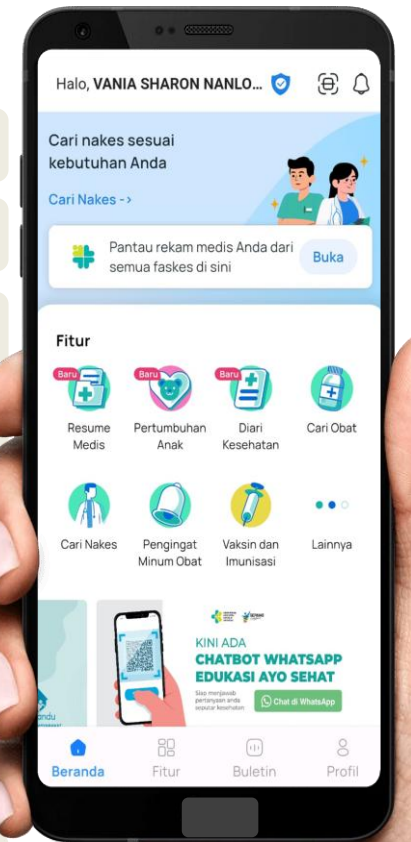
- 1 Hypertension screening
- 2 Diabetes screening
- 3 Stunting recording
- 4 Immunisation recording
- 5 Pregnancy Posyandu screening
- 6 Teenager Posyandu Screening
- 7 Baby Posyandu Screening
- 8 Toddler Posyandu Screening



Parents will automatically receive WA notification after their child immunisation visit, on the condition that the number recorded is active & correct

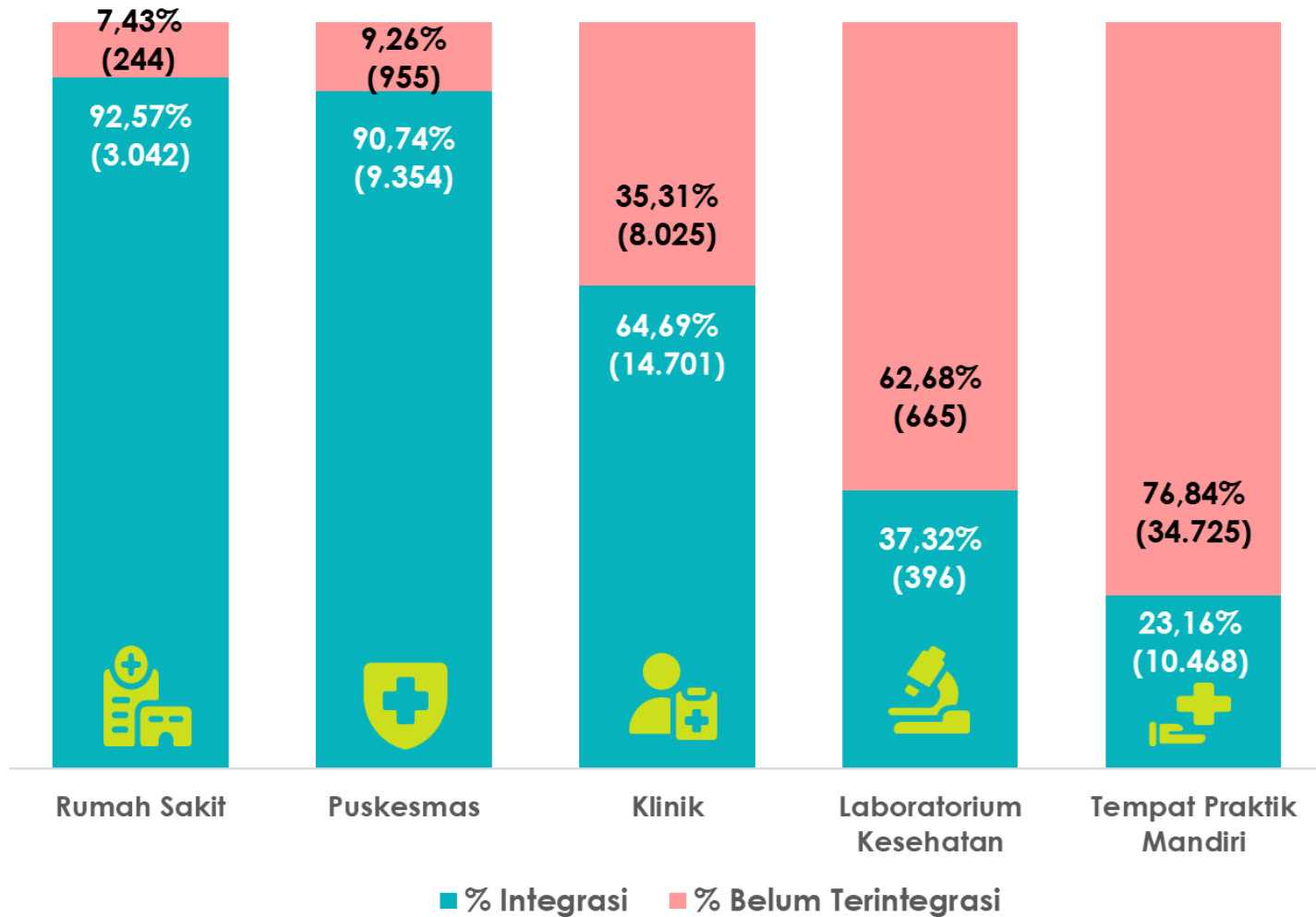


- 1 Electronic Medical Record
- 2 Medicine Reminder
- 3 Find Medicine & Doctor
- 4 Pregnancy Diary
- 5 Health News
- 6 Health Bulletin
- 7 Vaccination History
- 8 Health Diary
- 9 Immunisation History
- 10 Child Growth



A total of 38,288 health facilities out of 125,901 health facilities throughout Indonesia have been integrated and sent data to SATUSEHAT.

SATUSEHAT Integration Level based on Facility Type



SATUSEHAT Platform

243,5 Million Visits

67 Million Patients

8,414 Health Facilities | 18 Million Data Medical prescription

2,848 Health Facilities | 10 Million Data Tes Lab

123 Health Facilities | 108,000 Data Radiology

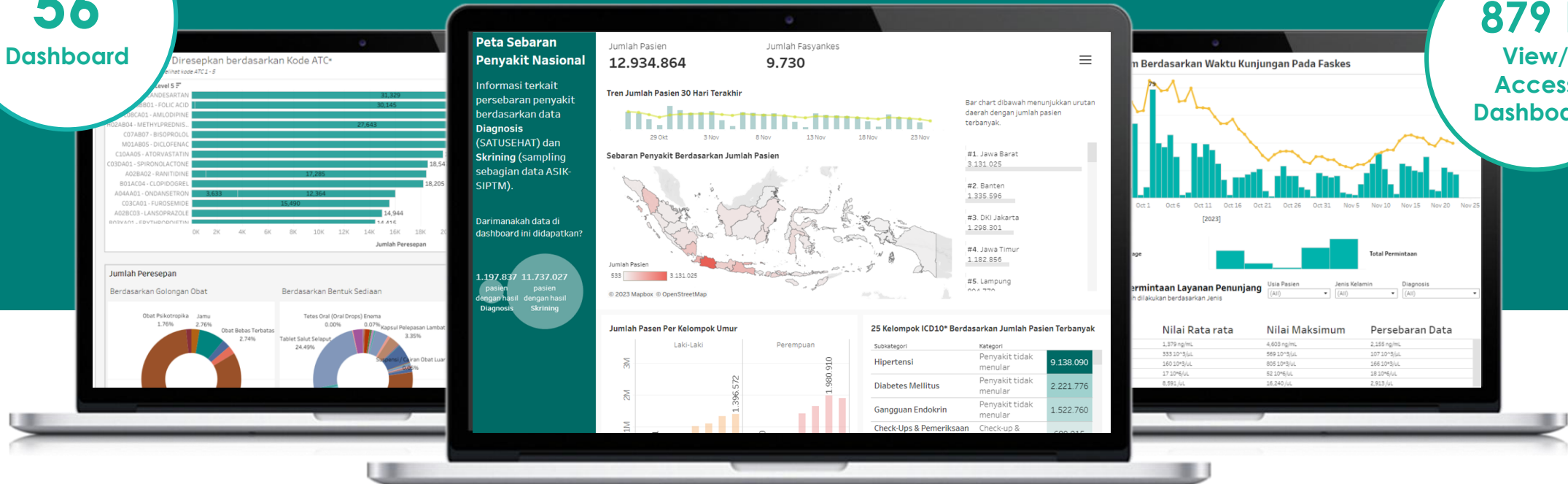


SATUSEHAT Data: supports comprehensive Health Data Analysis

56 public & private dashboards are available with > 879K total access, strengthening data-driven monitoring and decision-making.

56
Dashboard

879 K
View/
Access
Dashboard



Diagnosis and Treatment
Monitoring Dashboard

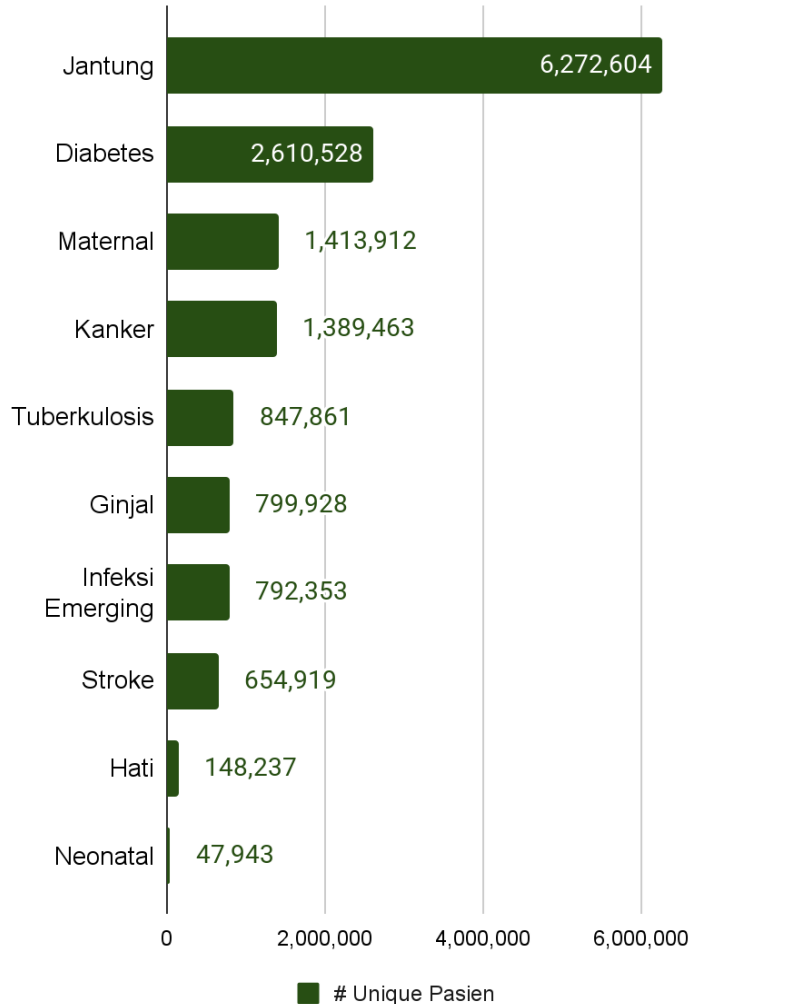
Comprehensive disease distribution
dashboard from screening (ASIK-
SIPTM) to diagnosis (SATUSEHAT)

Lab Test Results Monitoring
Dashboard and Diagnostics

Utilization of Electronic Medical Records (EMR) at SATUSEHAT

SATUSEHAT as a disease detection tool and supports public policy

• Distribution graph of 10 Priority Diseases based on unique patients



• Top 5 prescribed drugs at SATUSEHAT

Drug Name	Conditions Treated	Total Drug Prescriptions
Paracetamol 500 mg	Fever, pain	454,427
Candesartan Cilexetil 8 mg - 16 mg	Hypertension, heart	269,766
Bisoprolol Fumarate 2,5 mg	Hypertension, heart	134,446
Ranitidine Hydrochloride 150 mg	GERD, gastritis	125,826
Diclofenac Sodium 50 mg	Muscle pain, arthritis	122,758

• Top 5 laboratory tests at SATUSEHAT

Lab check type	Function	# Service Lab
Microscopic observation in Sputum by Acid fast stain	Detecting acid-fast bacilli (TB disease).	3,364,541
CBC panel - Blood by Automated count	Complete blood test	909,904
Glucose in Serum or Plasma	Assess blood sugar levels	893,878
Hemoglobin in Blood	Assess hemoglobin levels for anemia.	865,147
Hemoglobin H inclusion bodies in Blood	Hemoglobin abnormalities, for thalassemia.	610,560

SATUSEHAT supports Priority Program: Free Health Check

Supports the free health check (CKG) priority program, assists health workers, and provides automatic follow-up recommendations.

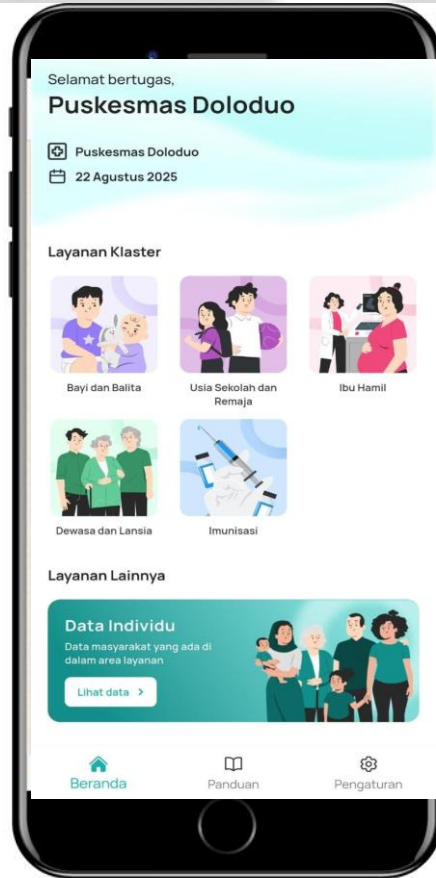
1 Supporting healthcare workers in out-of-building services and providing automatic follow-up recommendations according to community conditions.

2 The public receives direct health service results via WhatsApp notifications, including immunization reminders and follow-up visit schedules for hypertension.

3 People use SATUSEHAT Mobile as a Personal Health Record



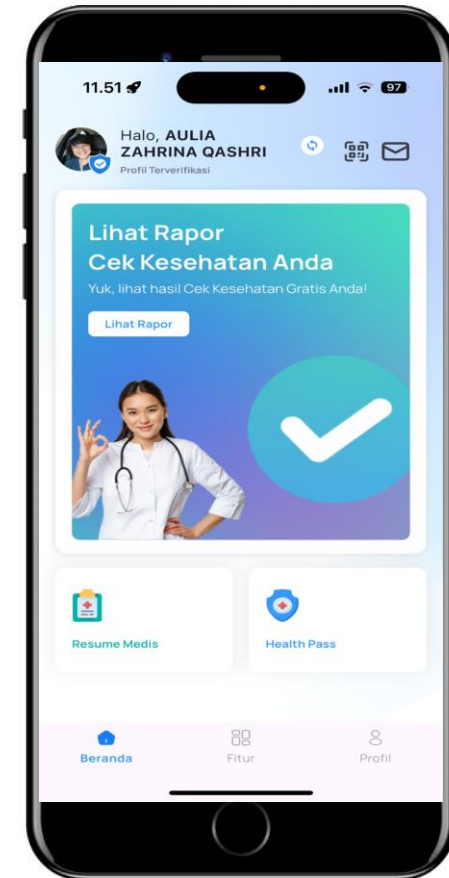
- 1 Hypertension Screening
- 2 Diabetes Screening
- 3 Recording for Stunting
- 4 Immunization Recording
- 5 Posyandu Screening for Pregnant Women
- 6 Adolescent Posyandu Screening
- 7 Posyandu Infant Screening
- 8 Toddler Posyandu Screenin



Parents will automatically receive a WhatsApp notification regarding immunization if the health worker correctly inputs the WhatsApp number on SATUSEHAT IndonesiaKu (ASIK).



- 1 Electronic Medical Resume
- 2 Medication Reminder
- 3 Find Medicine & Find Healthcare Workers
- 4 Pregnancy Notes
- 5 Health News
- 6 Health Bulletin
- 7 Travel Vaccination History
- 8 Health Records
- 9 Routine Immunization History
- 10 Child Growth



SATUSEHAT Claims: Benefits of Claims Integration for the Health Ecosystem



Simplification and Integration of Claims Process

Simplify the claims process with seamless data exchange between healthcare facilities and insurers.



Data Exchange Standardization

Using HL7 FHIR & API. Ensures interoperability between systems.



Transparency, Efficiency and Quality Control

Transparent, accountable & efficient claims. Providing financing standards & service quality standards.

Before and After Integration Comparison

Present condition

Patient

- Must bring insurance card
- Long registration process
- OOP costs if insurance has not cooperated

Health facilities

- Manual documents via PDF/WhatsApp/email
- Different integrations for each insurance
- The excess value is uncertain

Insurance

- Medical record data is not yet digital
- Manual verification with the risk of human error
- The integration process into each different health facility

After Integration

Patient

- ✓ Just bring your NIK for all insurance
- ✓ Faster registration and discharge
- ✓ Cashless payment

Health facilities

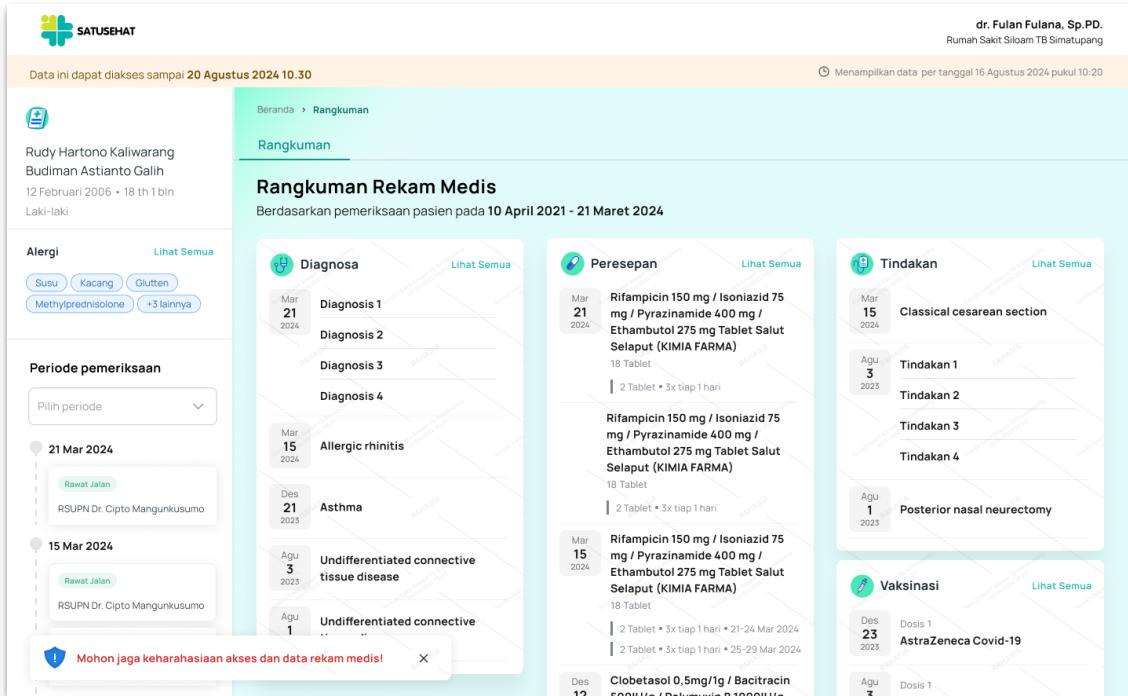
- ✓ Electronic medical records are available at SATUSEHAT
- ✓ Interoperability with all insurances
- ✓ Certainty of excess from the guarantor

Insurance

- ✓ RME digital standards and terminology
- ✓ Automatic verification, more consistent and certain
- ✓ Just integrate into SATUSEHAT



About SATUSEHAT Medical Records



The screenshot displays the SATUSEHAT Medical Records interface for a patient named Rudy Hartono Kaliwarang. The interface is organized into several sections:

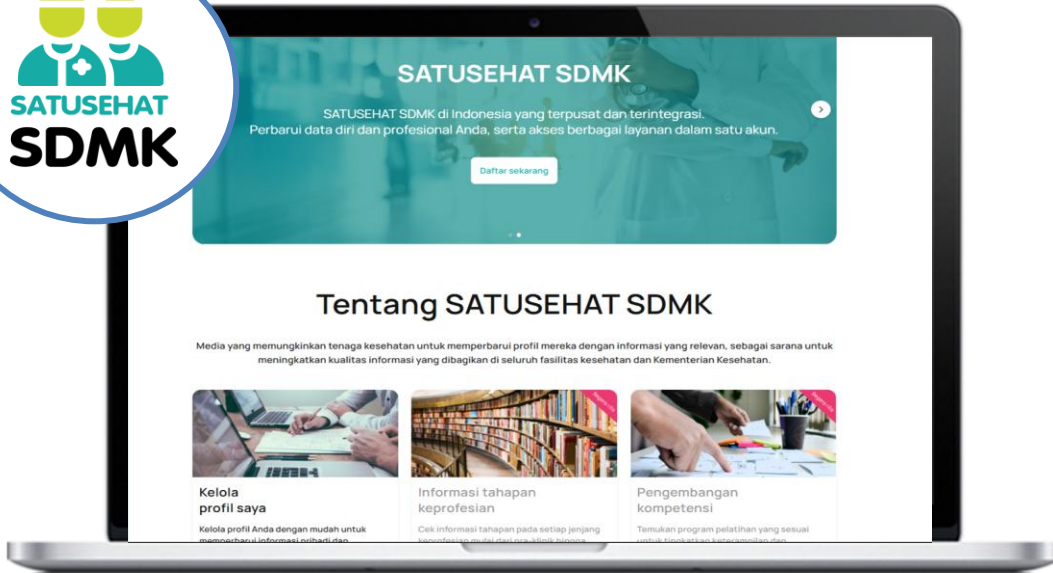
- Header:** Shows the patient's name, date of birth (12 Februari 2006), gender (Laki-laki), and the doctor's name (dr. Fulan Fulana, Sp.PD.).
- Diagnosis (Diagnosa):** Lists medical conditions such as Allergic rhinitis, Asthma, and Undifferentiated connective tissue disease.
- Prescription (Peresepan):** Lists medications like Rifampicin, Isoniazid, Pyrazinamide, Ethambutol, and Clobetasol.
- Action (Tindakan):** Lists medical procedures such as Classical cesarean section and Posterior nasal neurectomy.
- Vaccination (Vaksinasi):** Shows the patient's vaccination history, including AstraZeneca Covid-19.
- Left Sidebar:** Contains filters for allergies (Susu, Kacang, Glutten), examination periods, and a list of recent visits.

SATUSEHAT Medical Records is the **Official Health Application from the Ministry of Health of the Republic of Indonesia** that serves as a source of information for medical record history data, integrated to facilitate medical personnel in supporting medical decision-making.

Currently, SATUSEHAT Medical Records contains a summary of medical record data, namely:

1. Patient demographic data
2. Allergy data
3. Diagnosis data
4. Prescription data
5. Action data
6. Immunization/vaccination data





satusehat.kemkes.go.id/sdmk



One Data for Health Workers

Real-time health worker data updates



Facilities for Health workers

Easy access to registration, updates and licensing



Support for Health Facilities & Health Offices



Data integration and validation for health facilities and departments



Key Features SATUSEHAT SDM

Lifetime STR, SKP & LMS, Digital Licensing, Access to various HRD Directorate General Support Systems

Forms of Utilization of SATUSEHAT SDM

 Human Resources Planning	Renbut SDM
 Fulfillment of Human Resources in Hospitals	RS Online
 Provision of Incentives for Health Workers	Insentif UKM
 Human Resources Fulfillment Standards	ASPAK, SINAF
 Integration between Ministries/Institutions	BKN, Ministry of Social Affairs, TASPEN, Bapenas, Ministry of Finance, BP2MI, OP, DPMPTSP
 Digital Licensing Services (Regular & Special SIP)	MPP Digital, Ministry of Health's Internal Information System



The image features a complex digital interface with a central flowchart. The flowchart consists of two rows of boxes: the top row contains 'Diagnosis', 'Treatment', and 'Seigting'; the bottom row contains 'Regiment', 'Naviation', and 'Outcooce'. Arrows indicate a flow from left to right in each row, and vertical arrows point upwards from the bottom row to the top row. Below the flowchart are three buttons labeled 'Shanon', 'D. matusudin kurniawan', and 'Sotiradaning'. The background is a blue-toned digital space with various icons: a shield with a checkmark, a house, a dollar sign, a heart, a calculator, a stethoscope, a person, a location pin, a briefcase, a smartphone, a laptop, a server rack, a gear, and a mail icon. In the foreground, a man in a suit points towards the interface while talking to a woman in a nurse's uniform. To the left, another man in a doctor's coat and a woman in a nurse's uniform are looking at a tablet.

SATU SEHATINDONESIAIAKU

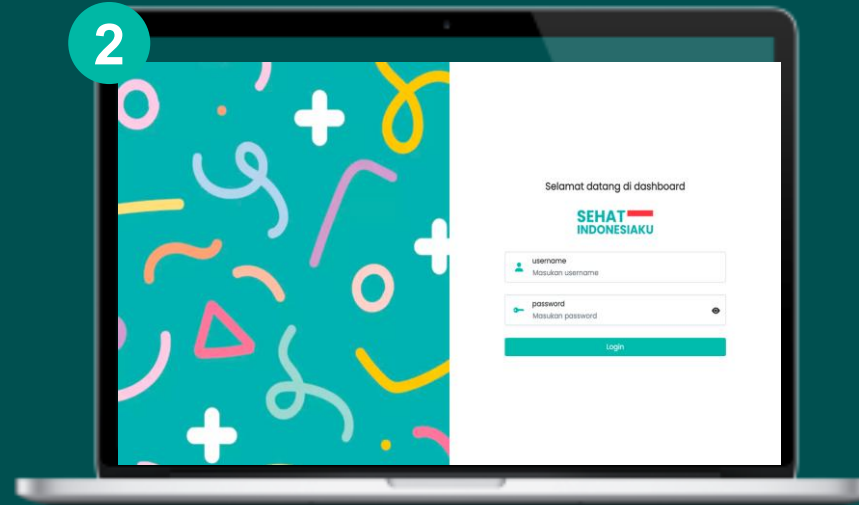
(SSI)

SATUSEHAT IndonesiaKu (SSI)

Improving access and data collection process for health outreach activity programs



SATUSEHAT IndonesiaKu (SSI) is a centralized, integrated mobile application that is used for data input, monitoring patient progress data for all primary care health workers and cadres for **outside the building data collection**.



- **Android & iOS Application:** used by health care workers and health cadres for data collection outside the building such as Posyandu, ANC, surveillance, screening, etc,

- **Web based:** used by health care workers at Puskesmas to monitor program implementation outside the building, connected automatically with ASIK mobile

<https://sehatindonesiaku.kemkes.go.id/>

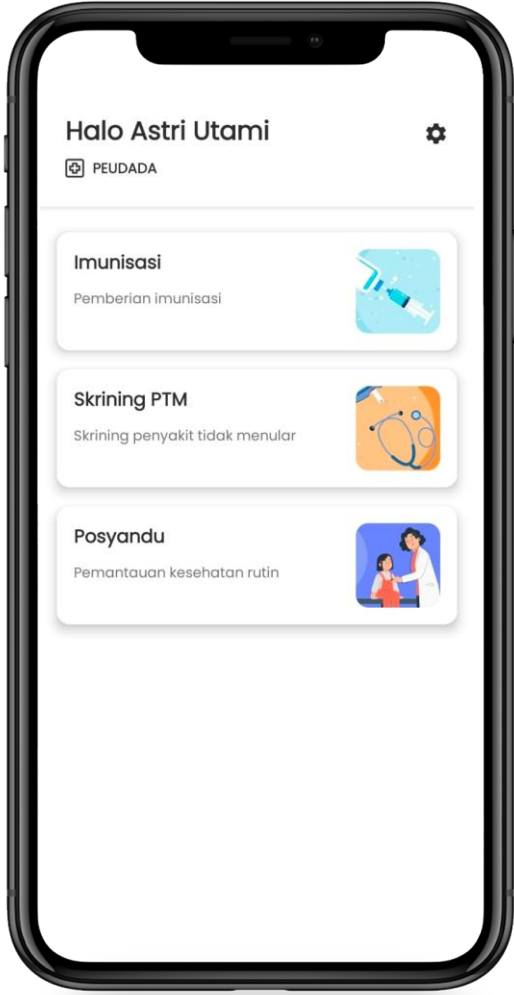
Implementation of Data for Community Outreach Activity

SSI & Whatsapp Chatbot - providing integrated mobile application and analytics dashboard.

SATUSEHAT IndonesiaKu (SSI)

Launched in **May 2022** across Indonesia

- Features
- Immunization report
 - NCD Screening
 - Posyandu for Pregnant Women
 - Posyandu for Children Under 5
 - Health Services for Adolescent



Covered

~10,250 (98,65%)
Puskesmas

Utilized by

Total **~266.270**
Doctor, nurse, midwives

Total **~320.432**
Community health workers (cadres)

Total **~222.651**
Other health workers

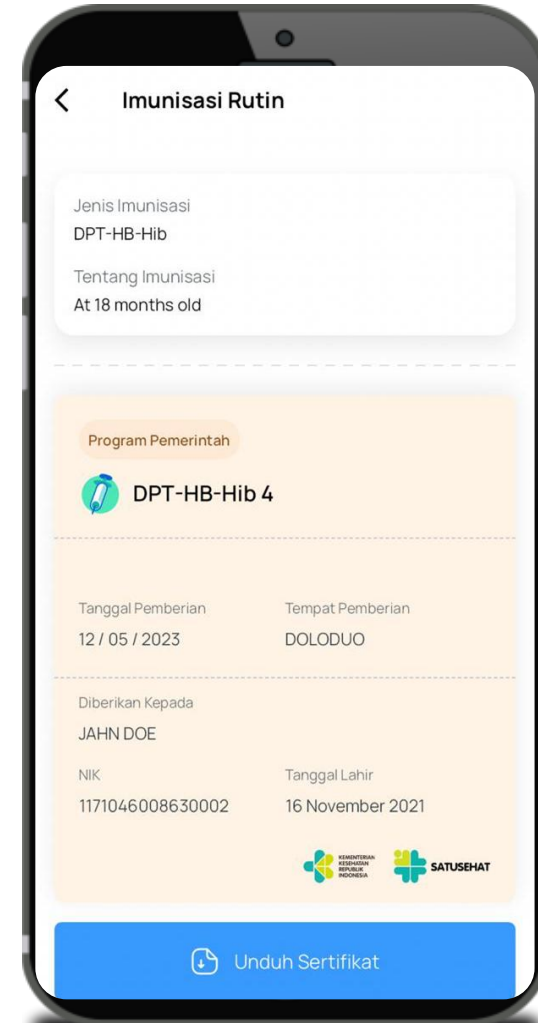
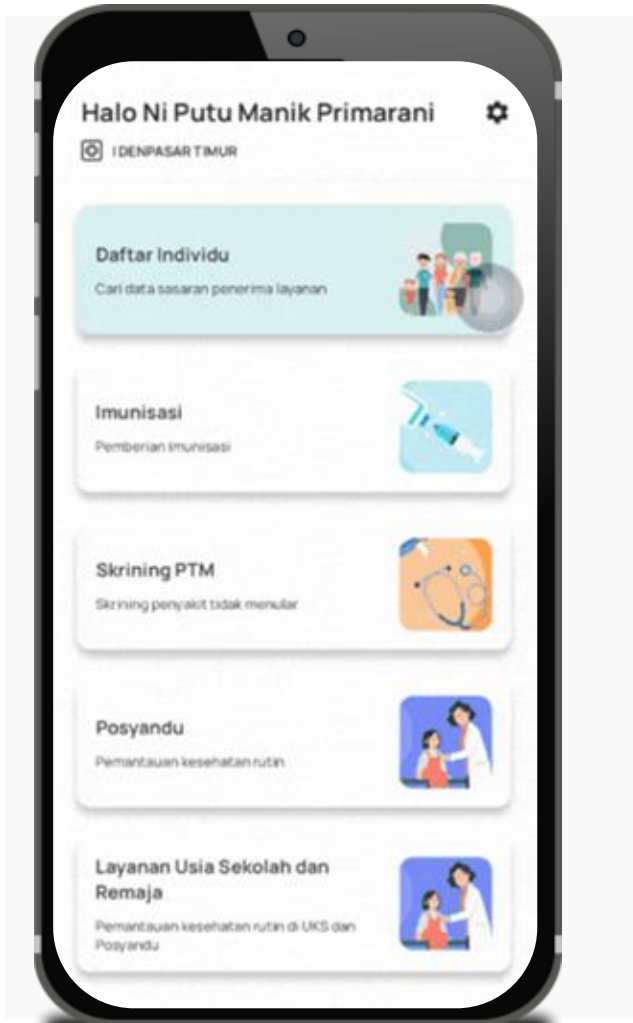
Whatsapp Chatbot for Cadres

Launched in **March 2023**
In DKI Jakarta and West Java

- Features
- Under 5 years old nutritional status screening data input (stunting prevention)
 - Monitoring supplementary feeding
 - Generating notification and reminder for parents based on measurement
 - Generating notification and reminder of immunization for parents
 - Notification for NCD & servical cancer screening



Electronic Immunization Registry



BIAN (May - Dec 2022)

21,895,760
individual Immunization records

Routine Immunization Jan 2023 - present

276,733,867
individual Immunization records

Whatsapp Notification Jan 2024 - present

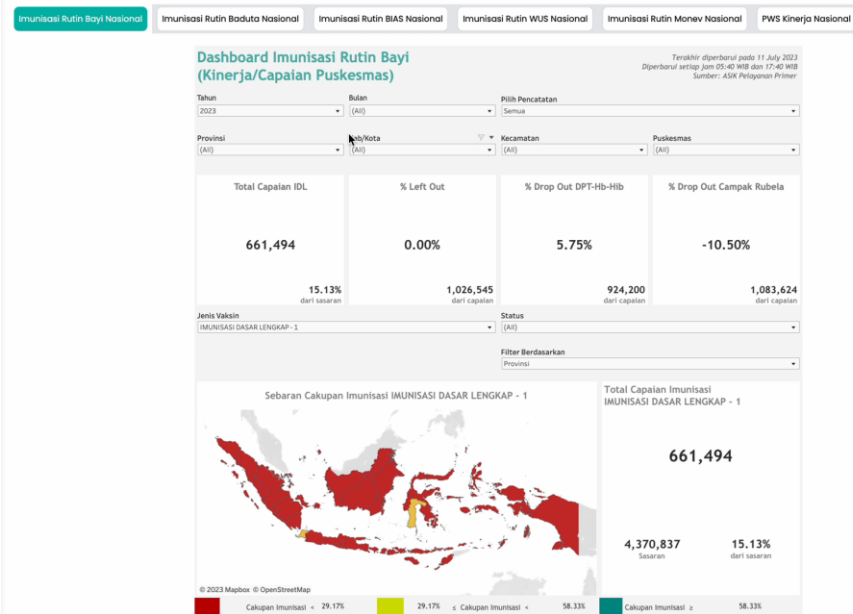
3,375,697
Total notification sent

Indonesia has started developing Electronic Immunization Registry (EIR) by capturing individual data vaccinated through SATUSEHAT IndonesiaKu (SSI) mobile apps and integrated into Satu Sehat. Parents will be able to receive whatsapp notification and download the digital certificate through Satu Sehat Mobile

Operational Dashboard of Immunization in SATUSEHAT IndonesiaKu (SSI)

Monitor routine immunization coverage in each area at individual level (by name by address)

Analisa Imunisasi Rutin Kinerja Puskesmas



Riwayat Imunisasi

Nama: ANAK 1 BULAN, NIK: 1400000000000000, Jenis kelamin: Laki-laki, Tanggal lahir: 8 April 2023

Setelah dibuka akan tampil list riwayat imunisasi rutin

Bayi	Baduta	Sekolah Dasar	WUS	Tambahan		
Imunisasi	Ke	No Batch	Program	Tanggal Penyuntikan	Pos Imunisasi	Aksi
HB			Imunisasi rutin bayi			Ubah Hapus
HB	1					
BCG			Imunisasi rutin bayi	22 Mei 2023	HARAPAN BUNDA	Ubah Hapus
BCG	1	RUYU				
Polio Tetes			Imunisasi rutin bayi	22 Mei 2023	HARAPAN BUNDA	Ubah Hapus
Polio Tetes	1	7850				
Polio Tetes	2					

Klik ubah untuk mengedit

Ubah Data

Ubah data yang dibutuhkan

Kecamatan: Alapan, Pos Imunisasi: HARAPAN BUNDA

Tanggal penyuntikan: 21 Mei 2023

Jenis imunisasi: BCG, Ke: 1

No batch: 5984

Batal | Simpan

Lalu simpan

AKTIVASI PENGGUNA ASIK MOBILE

Pengguna Aplikasi Mobile

Total pengguna: 28 orang

Cari NIK/Nama: Cari NIK atau nama petugas

No	NIK	Nama	STB	Profesi	No telepon	Puskesmas	Status
1	8272012404930001	Abdul Rajak Syahr	300172224194210	Perawat	6288242976747	SOA SID	ON
2	8102212729220003	Asrul adom	3001819319792	Perawat	6282142932218	SOA SID	ON
3	8272019080900003	Bowadi		Tenaga sanitasi lingkungan	6282293042429	DUN SID	ON
4	8272019080900003	Dwiliti Nurhadidjah	300282223418316	Dokter	6282242932218	SOA SID	ON
5	872010709920002	Faisal Adam		Tenaga promosi kesehatan & BPRU perilaku	628134843321	SOA SID	ON
6	8272045302800001	Febriyanti sofyan	300152282273372	Perawat	628241979717	SOA SID	ON

Ubah status menjadi aktif dengan menggeser tombol menjadi warna hijau

Menampilkan data identitas & Puskesmas penginput

Menampilkan data tgl imunisasi, tanggal input, puskesmas pencatat, status penyuntikan, dan menu penyuntikan

Data IDL data dilihat:
- Tanggal IDL
- Tanggal input IDL
- Puskesmas yang mendapatkan IDL anak yang IDL nya bukan di Puskesmas tsb, karena filter tgl lahir. (semua anak yang pernah disuntik di Puskesmas tsb bisa muncul)

https://docs.google.com/spreadsheets/d/1feEqNlGwIsHwC4FYcd1tBSUj7_2FkqYqymQo05Uj0/edit?usp=sharing

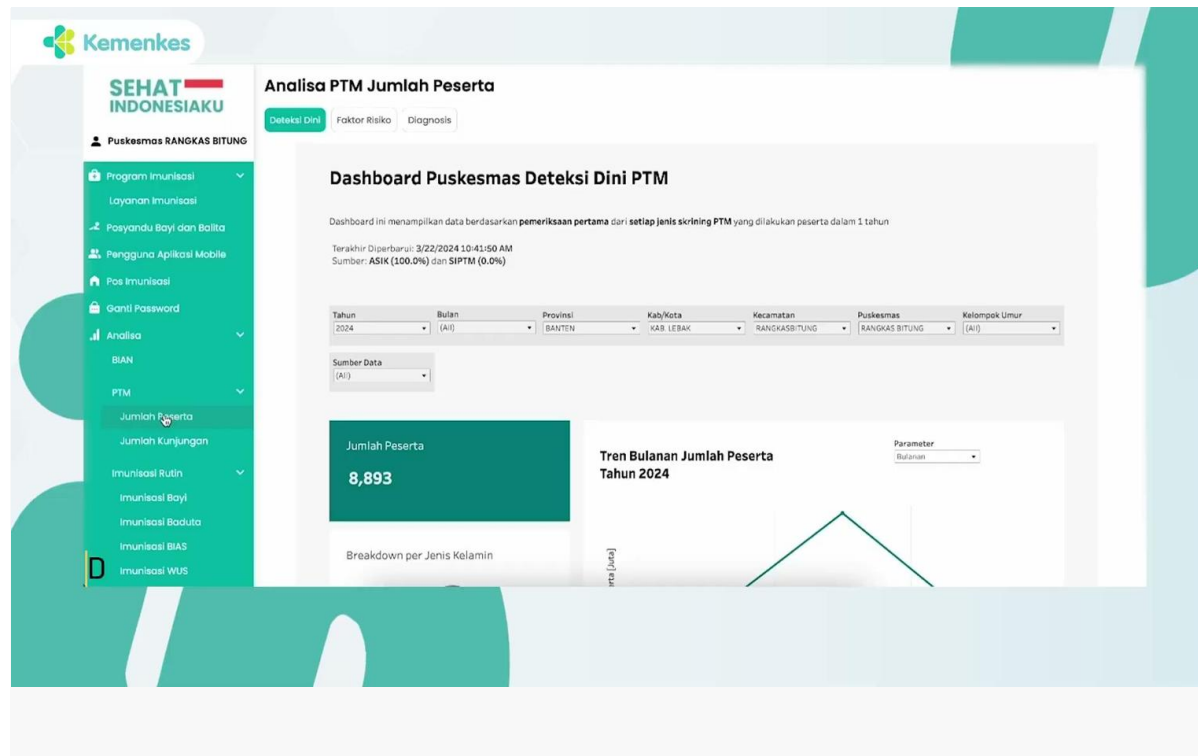
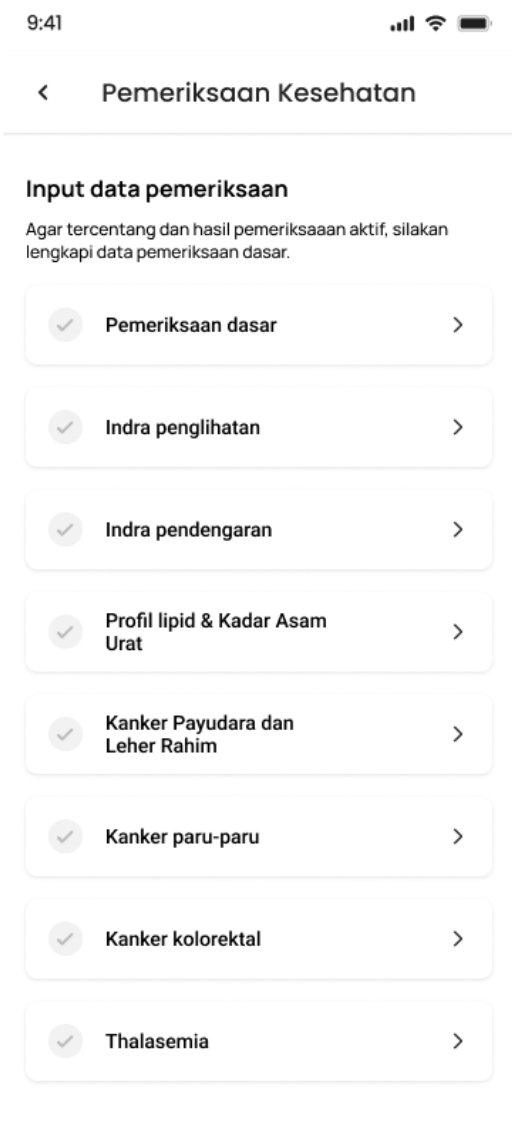
Monitoring the achievement of immunization coverage in the work areas of Puskesmas, District/City Health Offices, Provincial Health Offices

Edit and delete data feature

User verification feature, viewing a list of immunization activities and individuals who received immunization services

sehatindonesiaku.kemkes.go.id

NCDs Screening Digitalisation

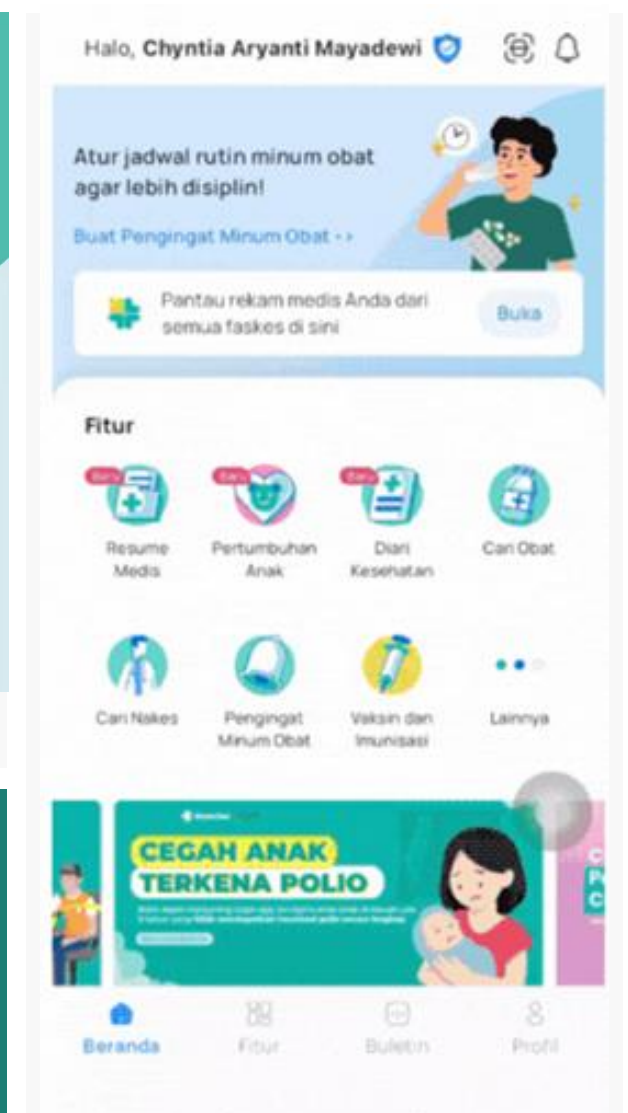


Mei 2022 - Present

214,731,326

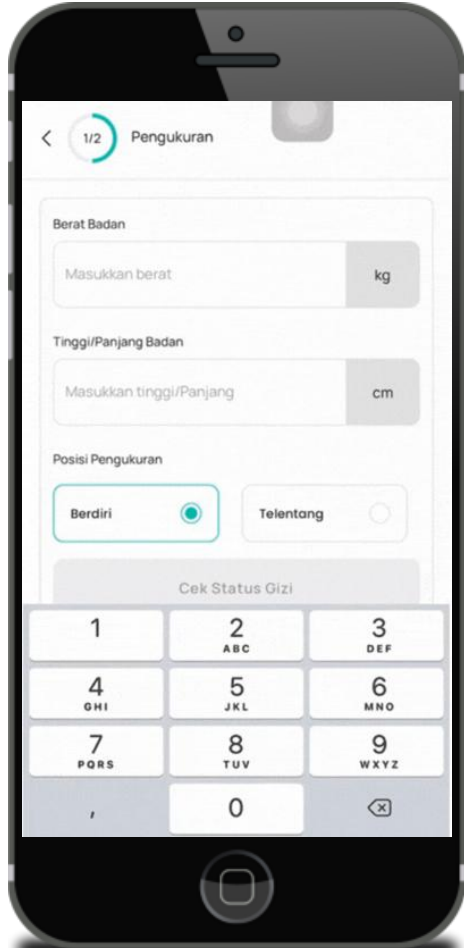
NCDs screening records

Non-communicable disease screening has been collected using ASIK mobile app. By having sufficient internet connection, digital data reporting can be sent into Satu Sehat and presented in an integrated analytic dashboard. Indonesian citizen now can monitor their NCD status in Satu Sehat Mobile.

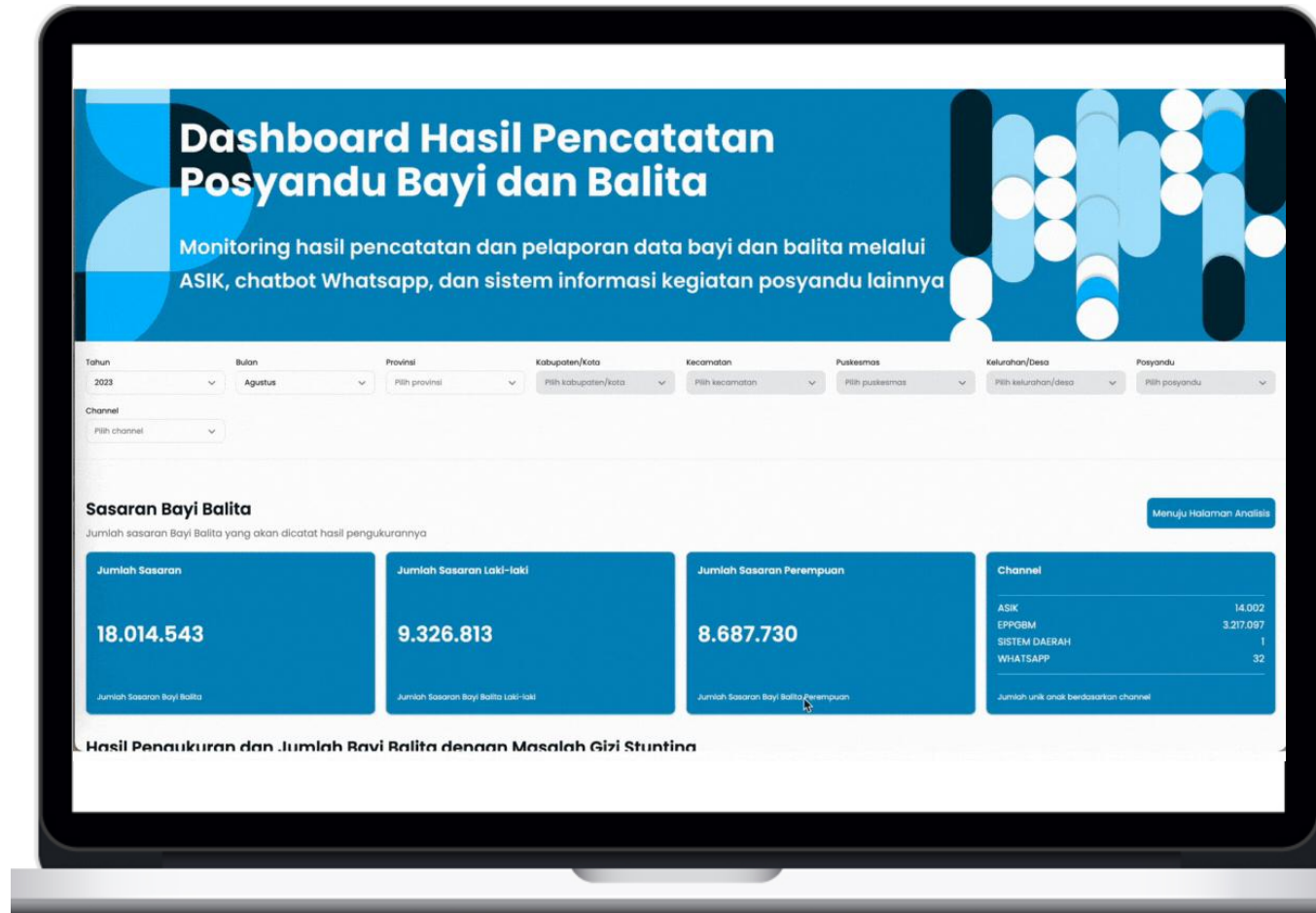


Digitalisation of Posyandu for Children Under Five

Aplikasi Satu Sehat Indonesiaku (ASIK)



ASIK Operational Dashboard



Whatsapp Notifications



To support the acceleration of stunting prevention program, MoH has develop digital data collection for measurements of CU5 in Posyandu and connected with integrated dashboard showing individual data (BNBA) for follow up. Parent will receive whatsapp notification regarding the measurement results in Posyandu.

Stunting Prevalence Prediction

Predicted Month Year

September 2024

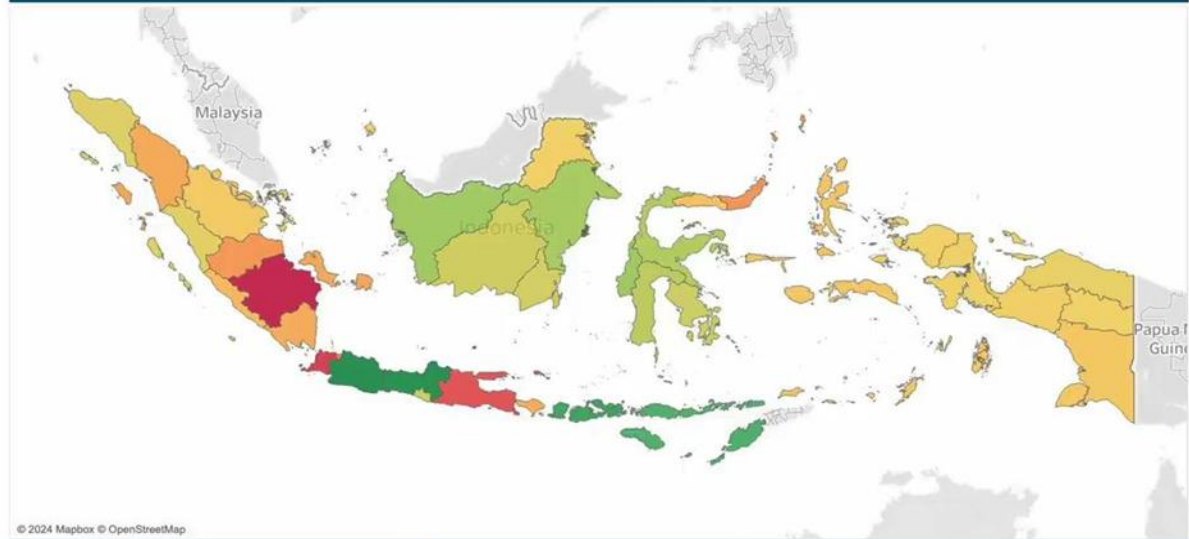
National Prevalence
September 2024

10,74%

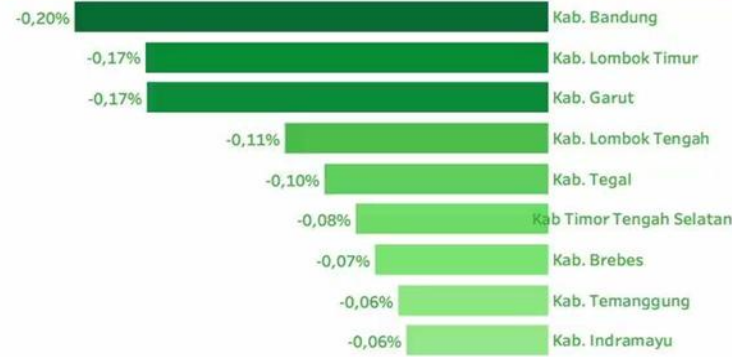
Predictable Toddler
7.955.051

The prevalence prediction does not yet reflect the overall target in September 2024, only based on the population of predictable toddlers.

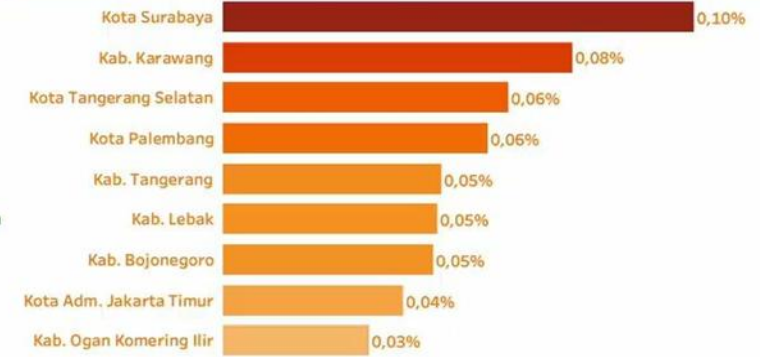
Forecasted Prevalence Change



Top Decrease National Prevalence

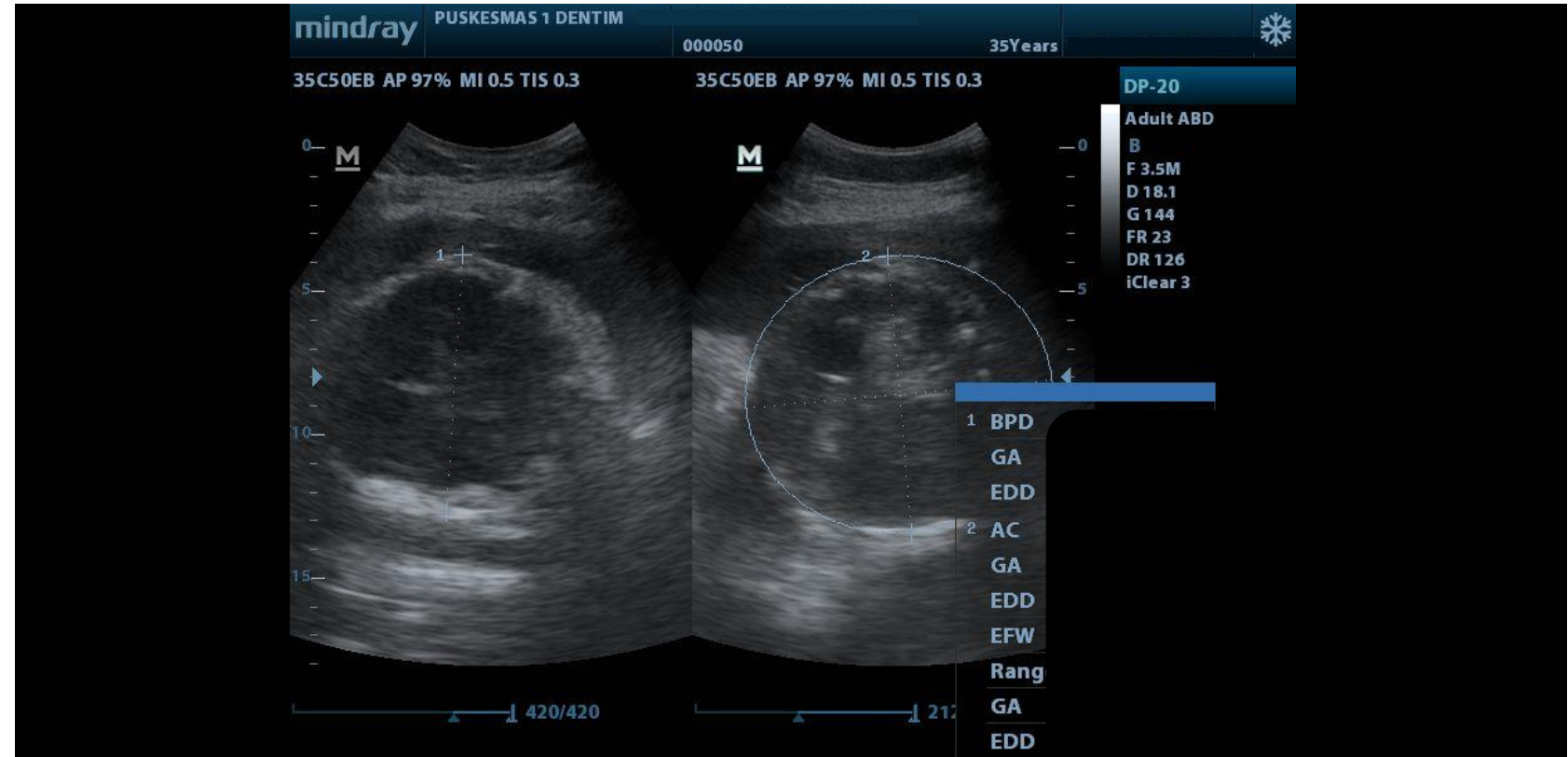


Top Increase National Prevalence



Stunting Prediction using Machine Learning

WhatsApp Notification for Ultrasound Scan for Pregnant Women



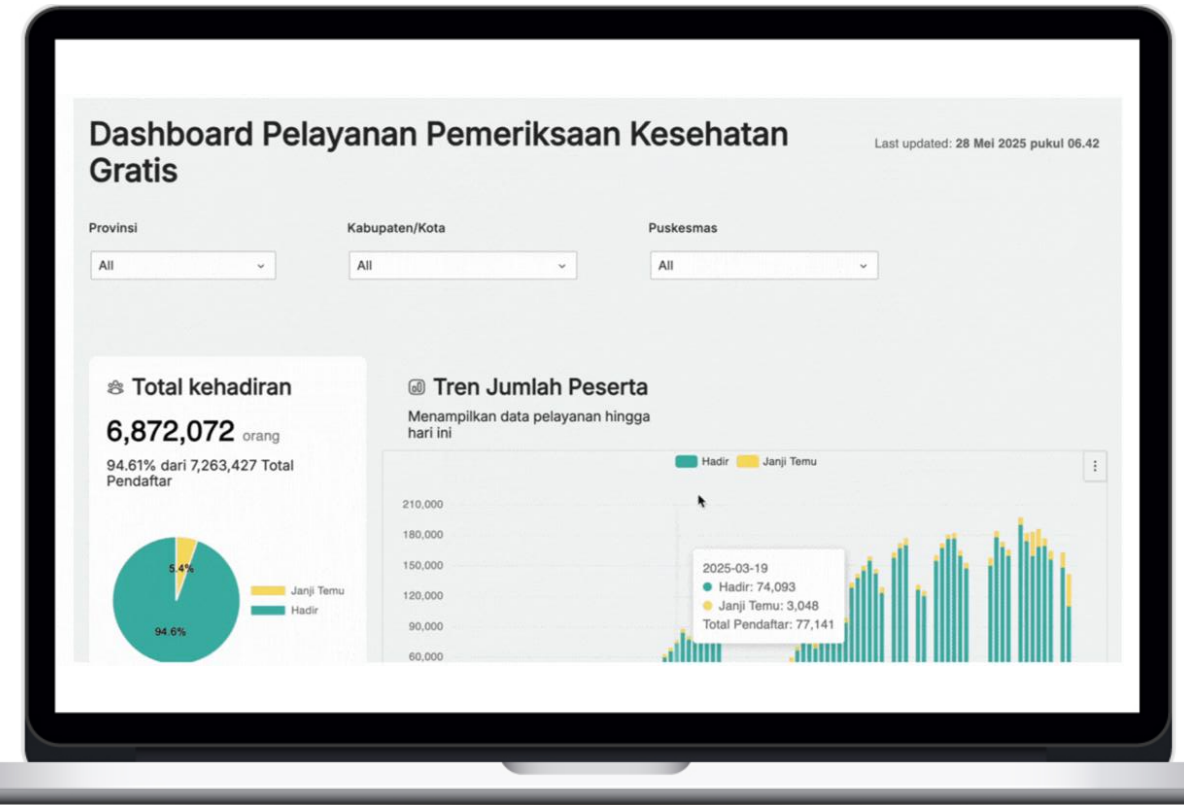
SUMMARY:

Pregnancy ultrasound data can be captured and sent into SATUSEHAT and the pregnant women will be able to receive information and USG scan pictures through automated Whatsapp notification from Ministry of Health.

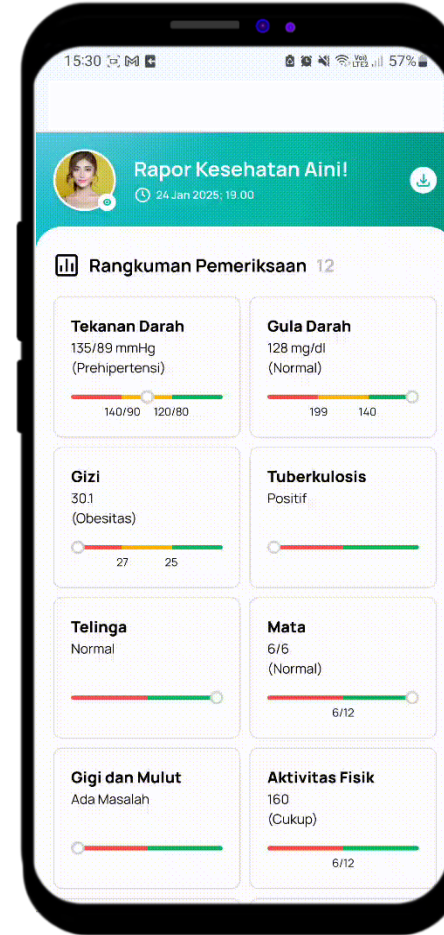
President's Priority Program: Free Health Screenings

Beneficiaries:
35,413,276
 individuals
 (February 2025 - present)

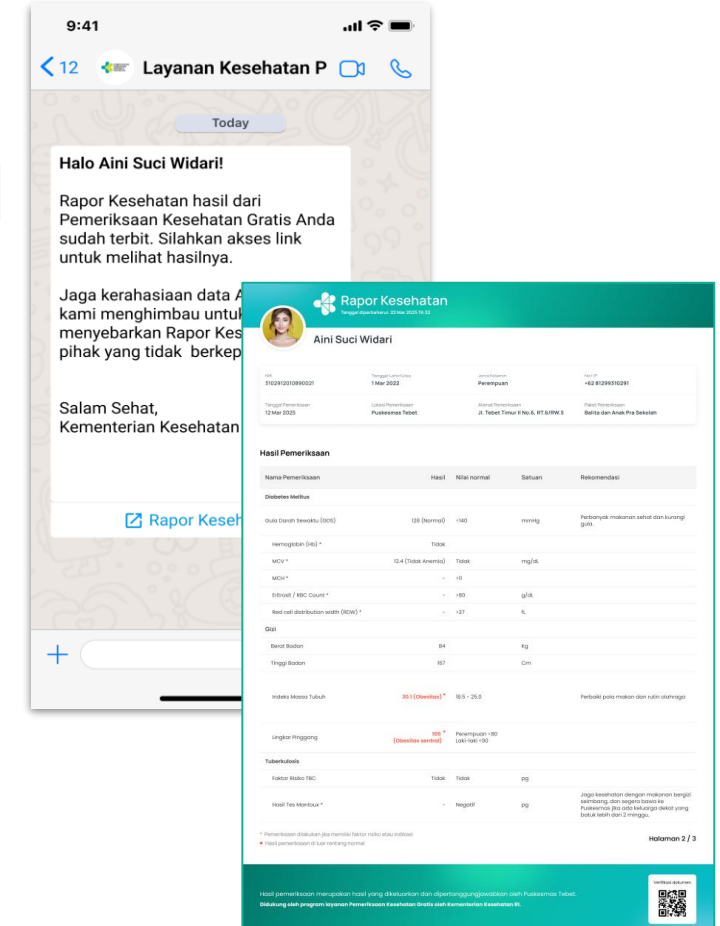
Program Coverage:
 Congenital malformation, anthropometry, developmental, TB, NCDs, mental health, cancer, geriatric screenings, etc.



Live dashboard for Puskesmas, Sub-National & National Officials to monitor population's health condition based on screening results



Individualized health recommendation based on screening results, sent through SATUSEHAT Mobile & WhatsApp



“The focus of digital health technology will **shift from Reporting to Service**. Therefore, for all innovators including health facilities, you are reminded to create technology that **serves the people that interact with the health facilities.**”

Ir. Budi Gunadi Sadikin, CHFC, CLU
Health Minister



Source: Kompas.com - 16/12/2021 with title "Menkes: Fokus Teknologi Digital Kesehatan Akan Digeser dari Pelaporan ke Pelayanan",





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Health Technology Transformation and Digitalization Team

