INDEPENDENT HEALTH-POLICY RESEARCH

Syrian National Health Reform Strategy
2027–2035

VOLUME III

Digital Health Transformation

National health information, standards and interoperability: one ecosystem, not one application

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THE CENTRAL PRINCIPLE

One ecosystem, not one application

> Syria should standardize **identity, terminology, data, interfaces, security, reporting and governance**, while allowing appropriate certified systems to coexist and interoperate.

Digital health is treated as a health-system transformation program, not an information technology project. Its purpose is the information infrastructure that universal health protection, continuity of care, strategic purchasing and public-health security all depend on.

The National Health Compact (November 2025) sets a target of at least 85% of priority facilities with functional electronic records interoperable with DHIS2. This volume describes the foundations that make such a target meaningful, rather than a count of installed systems.

TARGET ARCHITECTURE

Three transformation streams on one shared foundation

Digital care transformation
Primary care and hospital records, laboratory, imaging, pharmacy, referral, emergency, personal health record

Digital health-system management
Financing and claims, medicines and supply, workforce, facilities and assets, administration, licensing, quality

National health intelligence
DHIS2, surveillance, registries, outcomes, National Health Accounts, population analytics

NATIONAL INTEROPERABILITY AND SHARED SERVICES

Health information exchange · FHIR national profiles · Shared clinical summary · Referral · e-Prescribing · Eligibility and claims interfaces

FOUNDATIONAL NATIONAL SERVICES

National health number · patient registry · MPI · Provider registry · Facility and organization registries · Data dictionary · Terminology service · Essential package service catalogue

Governance · Privacy and security · Cybersecurity · Standards and certification · Infrastructure and connectivity

KEY MESSAGES

Ten rules for every digital-health investment

01

Govern it as health reform

Not delegated to technology departments alone.

02

Identity is public infrastructure

A health number and registries of patients, providers and facilities.

03

Standards before procurement

Workflows and standards agreed before national software purchases.

04

Know each system's role

DHIS2 is not the patient record.

05

Information follows the patient

To support continuity of care.

06

Connect the whole system

Financing, medicines, workforce and facilities linked to service delivery.

07

Security from day one

Cybersecurity, privacy and data governance are not later additions.

08

Arabic by design

In names, terminology and interfaces.

09

Pilot before scale

Validate national reference models first.

10

One architecture for partners

Partner investments conform to one national design.

IDENTITY

One person, one health number

Linked to the civil number where one exists, but never dependent on it. Care must continue for displaced people, returnees and refugees.

- Stable, lifelong and meaningless: no insurance, geography or clinical data in the number
- Matching designed for Arabic names and transliteration variability
- Temporary identity at the point of care; emergency care is never delayed

Master registry	Purpose
Patient registry and MPI	Stable identity and cross-system matching
Provider registry	Professional identity and regulatory status
Facility registry	Location, status and service profile
National drug dictionary	Standard medicine concepts and products
Terminology service	Approved code systems and versions
Package service catalogue	Machine-readable benefits for purchasing

THE SEQUENCE

Information before applications

1
Health-system model
Needs and outcomes

2
Future-state processes
Actors and workflow

3
Information requirements
Authoritative data

4
Data and terminology standards
Codes and identifiers

5
Enterprise architecture
Systems and shared services

6
Functional blueprints
Testable requirements

7
Technology and procurement
Certified, interoperable products

8
Measurable benefits
Quality, continuity, efficiency

Workflows, standards and architecture are validated before procurement.

CONNECTED CARE

Referral as a closed loop

1 · Decision
Primary care team decides to refer

2 · Electronic referral
Clinical question, summary and urgency sent

3 · Received
Receiving service acknowledges

4 · Accepted and scheduled
Appointment set by urgency

5 · Consultation
Assessment and treatment

6 · Response
Summary returned to the referring team

7 · Follow-up
Team acts on results and plan

8 · Closure
Loop closed; status visible to both sides

A referral is complete only when the receiving service has acted and the referring team sees the outcome.

HEALTH INTELLIGENCE

DHIS2 is not the patient record

Where DHIS2 adds value

Aggregate reporting, routine statistics, selected surveillance programs and program tracking.

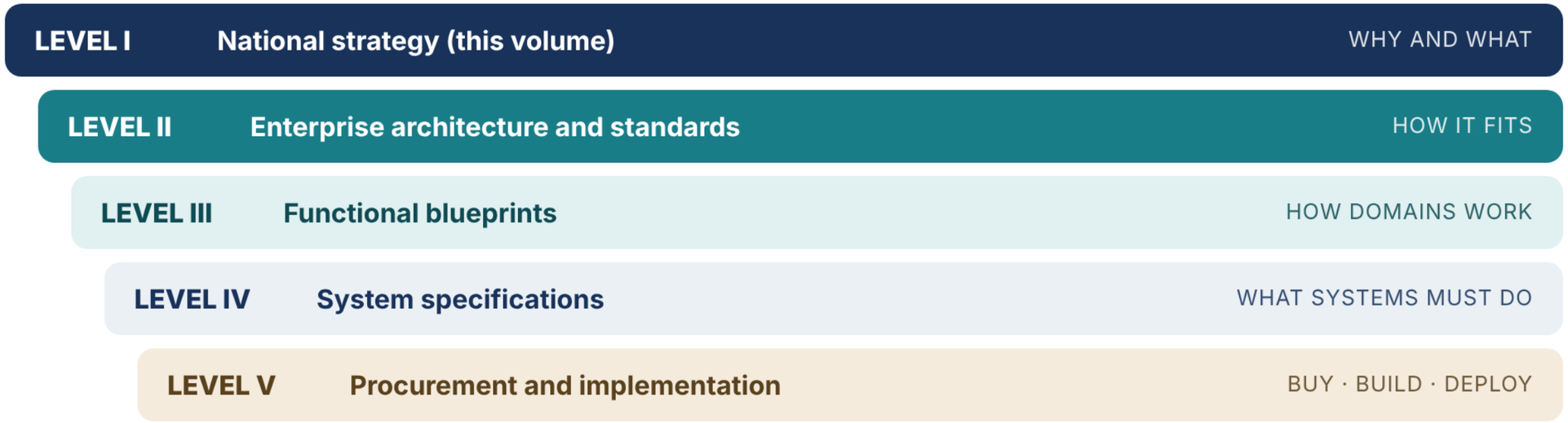
What it should not replace

Hospital, primary care, laboratory, imaging, pharmacy or claims systems, or the longitudinal record.

Modernization should reconcile DHIS2 organization units with the national facility registry, remove duplicate indicators and progressively receive validated data automatically from operational systems, so health workers stop entering the same information twice.

ARCHITECTURAL CONTROL

From strategy to procurement in five controlled levels



Keeping policy separate from vendor-specific functionality protects national ownership and avoids lock-in.

ON THE COMMON PATH TO 2035

Digital health in five phases

2027	2027–28	2028–30	2030–33	2033–35
BASELINE	**DESIGN**	**PILOT**	**EXPAND**	**CONSOLIDATE**
Governance charter; inventory of systems and data; workflow mapping; legal, privacy and cyber baselines	Data dictionary; health number and registries; FHIR profiles; enterprise architecture; blueprints	Primary care and hospital reference pilots; laboratory, referral and e-prescribing exchange	National exchange; shared summaries; claims transactions; national data platform	National rollout; patient services; analytics and AI governance; continuous improvement
Systems and data known	Standards published	Conformance shown	Adoption and benefits verified	Benefits sustained

The same five phases as all volumes of the series. Planning windows, not commitments.

WHAT IT MEANS FOR PARTNERS

Invest in the shared foundations

Donors and development partners

The health number and registries, the data dictionary and terminology service, FHIR profiles, laboratory and referral exchange, and capability building.

Technology companies

Products that implement national identifiers, terminology and FHIR profiles, work offline, support Arabic fully and pass certification.

Providers

Early adopters of coded records, electronic referral and claims benefit first from faster payment and better coordination.

Insurers and purchasers

Standard eligibility, coding and claims transactions cut administrative cost and enable fraud detection.

Investors

Connectivity, cloud and data centers, cybersecurity, informatics training and digital health services.

The goal

Not one national application, but the information nervous system of the future Syrian health system.

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Volume II — Health Insurance Reform
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Four volumes, one common path to 2035. Each can be read alone; together they set out one direction and the order in which to travel it.

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