

SECURE WEBINAR 24

Smart Health Systems: Leveraging Digital Solutions for Health Governance

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Digital Health Strategy and National Health Sector Reform Agenda of the Lao PDR

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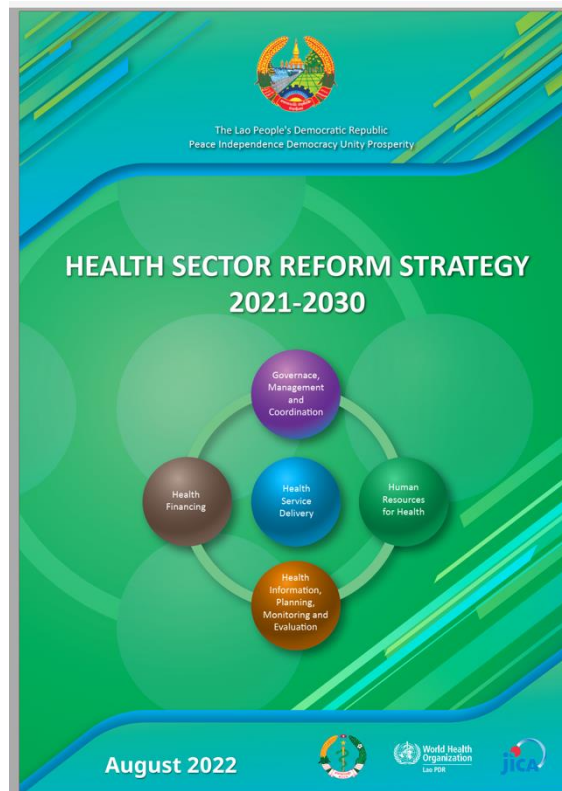
Minister

Ministry of Health

Lao PDR

Health Sector Policy

Lao Health Sector Reform Strategy (HSRS) 2021-2030



Health Sector Development Plan (HSDP) 2021-2025



Digital transformation of the health sector

National development strategy : “Digital Government, Digital Economy, Digital Society”

Prime Minister’s decree on the establishment of National Digital Transformation Steering Committee, No. 36/PM, dated 16 May 2023



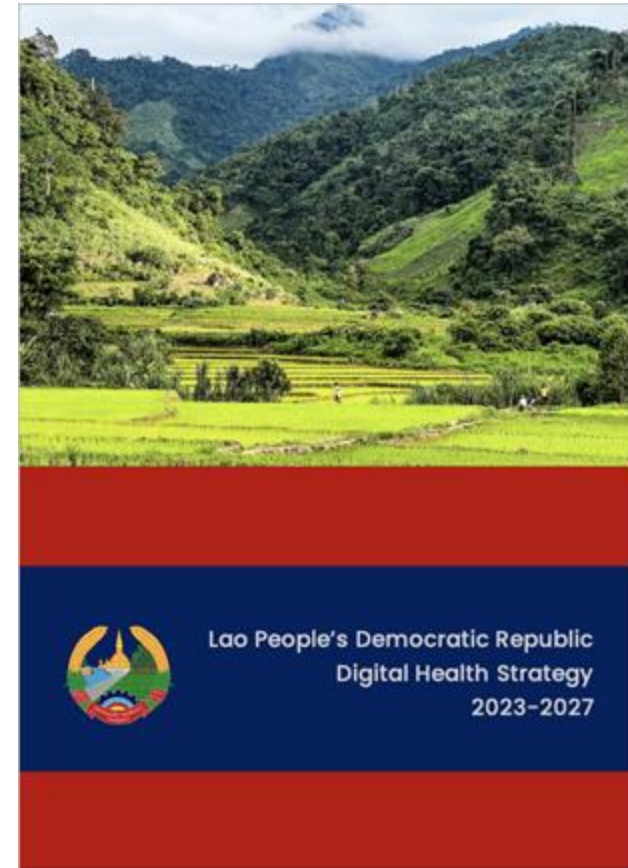
- **Improved efficiency**
- **Enhanced data management**
- **Improved patient care**
- **Better resource allocation**
- **Enhanced public health**

Strategy Development timeline



Digital Health Strategy content

- 70 pages:
 - Country situation analysis
 - Enabling environments analysis
 - Methodology
 - Vision
 - Strategic priorities and projects
 - Action Plan
 - M & E Framework



Guiding Development Principles

Building on existing work.	This strategy acknowledges the progress of digital health activities in Lao PDR to date and sought to advance stakeholder efforts to avoid duplication and wastage.
Focusing on the basics.	It was important that this strategy establishes the right foundations for a digital health ecosystem, by focusing on maturing the enabling environment, where there were noticeable weaknesses and barriers for digital health.
Choosing pragmatism over idealism	The strategy prioritises an achievable action plan that will result in real impact over ambitious endeavours.
Enabling national goals.	Recommendations in this strategy must align with existing national strategies and policies, facilitating their achievement.
Being cost conscious	Where possible, this strategy must leverage existing resources and explore innovative approaches that do not introduce excessive costs.

Digital health principles



Data-driven initiatives: Focus on ensuring quality information is available to the right people when they need it.



Interoperability: Promote seamless and secure information exchange through open standards and interoperable digital solutions.



Open-source software: Promote data preservation and greater freedom from technology and vendor lock-in through use of unlicensed, adaptable software.



Collaborative approaches: Inclusive action from government, development organisations, academia, research entities and private sector

Digital Health Strategy



Lao People's Democratic Republic
Digital Health Strategy
2023-2027

Ministry of Health



5 Strategic
Priorities

16 Strategic
Objectives
(SO)

37 strategic
projects (SP)

116
activities

1	Workforce (6 projects)	1.1 Pre-Service 1.1.1 Incorporate DH into health science undergraduate training 1.1.2 Create opportunities for (undergraduate and postgraduate) engagement in DH projects 1.2 In-Service 1.2.1 Introduce DH at CPD sessions in hospitals 1.2.2 Develop DH leadership capacity & competencies 1.3 New skills & roles 1.3.1 Develop a competency framework for DH 1.4 Leverage community 1.4.1 Collaborate with village chiefs and health volunteers to support DH activities
2	Governance (7 projects)	2.1 DH Governance 2.1.1 Include DH into sector wide steering committee agenda 2.1.2 Formalise a TWG for DH and health information 2.1.3 Establish a program management & coordination unit for DH 2.2 DH Coordination 2.2.1 Adopt a platform to track digital health investments 2.2.2 Regulate the selection of digital health technologies in Lao PDR 2.2.3 Regulate the use of interoperable standards 2.3 Policies 2.3.1 Publish key policy guidelines for interoperability, software selection, hardware and data storage
3	Standards (12 projects)	3.1 Unique identifiers for the health system 3.1.1 Establish a patient ID for all citizens 3.1.2 Establish a health worker ID for all health systems staff 3.1.3 Implement health facility master list in all existing systems 3.2 Minimum datasets (MDS) for DH registries 3.2.1 Establish a MDS for a patient registry 3.2.2 Establish a MDS for a health worker registry 3.3 Clinical Minimum datasets (MDS) 3.3.1 MDS for in-patient management 3.3.2 MDS for out-patient management 3.3.3 MDS for hospital discharge 3.3.4 MDS for hospital referral 3.4 Standard terminologies for health 3.4.1 Establish a coded morbidity and mortality list 3.4.1 Establish a coded medical procedures list 3.4.1 Establish a coded essential medicines list
4	Applications (7 projects)	4.1 Registries and services for a future DH platform 4.1.1 Establish a Client Registry to manage unique patient IDs 4.1.2 Establish a Health Worker registry to manage unique HW IDs 4.1.3 Establish terminology registry services 4.2 Clinical management systems 4.2.1 Implement a patient management system 4.2.2 Harmonize the existing laboratory systems 4.3 Resource management systems 4.3.1 Scale supply chain management system 4.3.2 Establish a national health insurance system
5	Infrastructure (5 projects)	5.1 Core digital infrastructure 5.1.1 Negotiate better rates and services from telecoms sector 5.1.2 Establish an asset management system 5.2 Core services and platforms for MoH 5.2.1 Enforce corporate email usage across MoH staff 5.2.2 Implement a shared document management system 5.2.3 Ensure infrastructure for remote working

Progress Review: Workforce

1 Workforce (2/6 projects)	1.1 Pre-Service	1.2 In-Service	1.3 New skills & roles	1.4 Leverage community
	1.1.1 Incorporate DH into health science undergraduate training	1.2.1 Introduce DH at CPD sessions in hospitals	1.3.1 Develop a competency framework for DH	1.4.1 Collaborate with village chiefs and health volunteers to support DH activities
	1.1.2 Create opportunities for (undergraduate and postgraduate) engagement in DH projects	1.2.2 Develop DH leadership capacity & competencies		

Project 1.2.2: Develop DH leadership capacity & competencies

Objective:

- 5 managers will have completed a higher-level tertiary qualification in DH
- 25 managers in the MoH will have completed a certified course in DH (5 per year)

Progress: started

- 4 civil servants doing higher level degree in health informatics (2 Masters, 1 PhD)

Project 1.4.1: Collaborate with village chiefs and health volunteers to support DH activities

Objective:

- 60% of villages participating in the Digital Health Ecosystem (DHE)

Progress: started

- Trained all village chiefs of Vientiane Capital, Vientiane Province, and Sekong Province in death notification

Progress Review: Governance

2	Governance (3/7 projects)	2.1	DH Governance	2.2	DH Coordination	2.3	Policies
		2.1.1	Include DH into sector wide steering committee agenda	2.2.1	Adopt a platform to track digital health investments	2.3.1	Publish key policy guidelines for interoperability, software selection, hardware and data storage
		2.1.2	Formalise a TWG for DH and health information	2.2.2	Regulate the selection of digital health technologies in Lao PDR		
		2.1.3	Establish a program management & coordination unit for DH	2.2.3	Regulate the use of interoperable standards		

Project 2.1.1 Include digital health into Sector Wide Steering (SWG) committee agenda and Establishment of Digital Health Transformation Steering Committee

Objective: Digital health is a standard agenda item at SWG steering committee meetings and establishment of Digital Health Transformation Steering Committee

Progress: Digital Health Transformation Steering Committee -Approved by Minister of Health

Project 2.1.2 Formalize a Technical Working Group

Objective: 4 TWG meetings held per annum

Progress: – 5nd TWG held in 2023, 2024 and 2025

Project 2.1.3 Establish a coordination unit for digital health

Objective: Establishment Digital Health Coordinating Office (DHCO)

Progress: the DHCO established , with Job descriptions, 3 from WB, 2 from UNOP, 1 from UNICEF, 3 from ADB

Progress Review: Standards

3	Standards (7/12 projects)	3.1 Unique identifiers for the health system	3.2 Minimum datasets (MDS) for DH registries	3.3 Clinical Minimum datasets (MDS)	3.4 Standard terminologies for health
		3.1.1 Establish a health ID for all clients	3.2.1 Establish a MDS for a client registry	3.3.1 MDS for in-patient management	3.4.1 Establish a coded morbidity and mortality list
		3.1.2 Establish a health worker ID for all health systems staff	3.2.2 Establish a MDS for a health worker registry	3.3.2 MDS for out-patient management	3.4.1 Establish a coded medical procedures list
		3.1.3 Implement health facility master list in all existing systems		3.3.3 MDS for hospital discharge	3.4.1 Establish a coded essential medicines list
				3.3.4 MDS for hospital referral	

Project 3.1.1 Establish a health ID for all clients

Objective: 70% clients will know their health ID by 2027

Progress: started – Client Health Registry (CHR) ID piloted in 5 provinces

Project 3.1.3 Implement health facility master list (HFML) in all existing information systems

Objective: All active clinical and resource management systems using the HFML

Progress: started – HFML developed, and integration to DHIS2

Project 3.2.1 Establish a minimum dataset for a client health registry (CHR)

Objective: 75% of provincial & district hospitals patient registration form include patient registry minimum dataset

Progress: started – proposed with the Client Health ID, to be tested

Progress Review: Standards

3	Standards (7/12 projects)	3.1 Unique identifiers for the health system	3.2 Minimum datasets (MDS) for DH registries	3.3 Clinical Minimum datasets (MDS)	3.4 Standard terminologies for health
		3.1.1 Establish a health ID for all clients	3.2.1 Establish a MDS for a client registry	3.3.1 MDS for in-patient management	3.4.1 Establish a coded morbidity and mortality list
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		3.1.3 Implement health facility master list in all existing systems		3.3.3 MDS for hospital discharge	3.4.1 Establish a coded essential medicines list
				3.3.4 MDS for hospital referral	

Project 3.3.1-3 Establish a minimum dataset for in-patient management / out-patient management / hospital discharge

Objective: 80% of provincial & district hospitals in-patient form include in-patient, out-patient and discharge minimum dataset

Progress: started – Completed pilot in Vientiane provinces

Project 3.4.1 Establish a coded morbidity and mortality list

Objective: 80% of all health facilities using coded morbidity and mortality list

Progress: started – DHR published the ICD-10-LM book in English/Lao, to be used in digital applications

Progress Review: Applications

4 Applications (5/7 projects)	4.1 Registries and services for a future DH platform		4.2 Clinical management systems		4.3 Resource management systems	
	4.1.1	Establish a Client Registry to manage unique patient IDs	4.2.1	Implement a patient management system	4.3.1	Scale supply chain management system
	4.1.2	Establish a Health Worker registry to manage unique HW IDs	4.2.2	Harmonize the existing laboratory systems	4.3.2	Establish a national health insurance system
	4.1.3	Establish terminology registry services				

Project 4.1.1 Establish a client health registry to manage unique patient IDs and patient registration information

Objective: Patient registry able to exchange data with active EMR systems in Lao PDR

Progress: Client Health registry ID registry pilot in 5 provinces and will rolling out countrywide in 2026

Project 4.2.1 Scale existing patient management systems

Objective:

- 50% of provincial hospitals implemented an EMR system
- 100% of EMR systems using health terminologies & data standards

Progress: **started** – LuxDev, ADB, KOFHI started developing Bahmni with data standards

Progress Review: Applications

4 Applications (5/7 projects)	4.1 Registries and services for a future DH platform		4.2 Clinical management systems		4.3 Resource management systems	
	4.1.1	Establish a Client Registry to manage unique patient IDs	4.2.1	Implement a patient management system	4.3.1	Scale supply chain management system
	4.1.2	Establish a Health Worker registry to manage unique HW IDs	4.2.2	Harmonize the existing laboratory systems	4.3.2	Establish a national health insurance system
	4.1.3	Establish terminology registry services				

Project 4.2.2 Implement laboratory management systems in provincial hospitals

Objective:

- 100% of provincial hospitals using a laboratory information system
- 100% laboratory systems connected to key systems

Progress: started – NCLE and TB developing a Lab management information system funded by GF and WB

Project 4.3.1 Scale supply chain management systems

Objective: Supply chain management system available at facility level

Progress: started – MPSC and DPF discussed on M-supply open source

Project 4.3.2 Establish a national health insurance system

Objective:

- NHI data managed electronically in an open-source system
- IPD and OPD claims data submitted through other key systems to NHI system

Progress: started – discussions on developing a new claim system

Progress Review: Infrastructure

5 Infrastructures (1/5 projects)	5.1 Core digital infrastructure	5.2 Core services and platforms for MoH
	5.1.1 Negotiate better rates and services from telecoms sector	5.2.1 Enforce corporate email usage across MoH staff
	5.1.2 Establish an asset management system	5.2.2 Implement a shared document management system
		5.2.3 Ensure infrastructure for remote working

Project 5.1.2 Establish an asset management system

Objective: All donor funded hardware captured in asset management system (AMS)

Progress: started – Routine ICT infrastructure mapping program was developed and ready to pilot

Digital transformation: way forward

- Stronger leadership and coordination
- Review and updating of digital health strategy
- Mobilization of funds (domestic and development partners' contribution) and prioritization of solutions for scale up
- Data quality and reliability
- Information and technology infrastructure
- People-centered solutions

Thank you!

