# Addressing Gaps in Government-led Digital Health Transformation
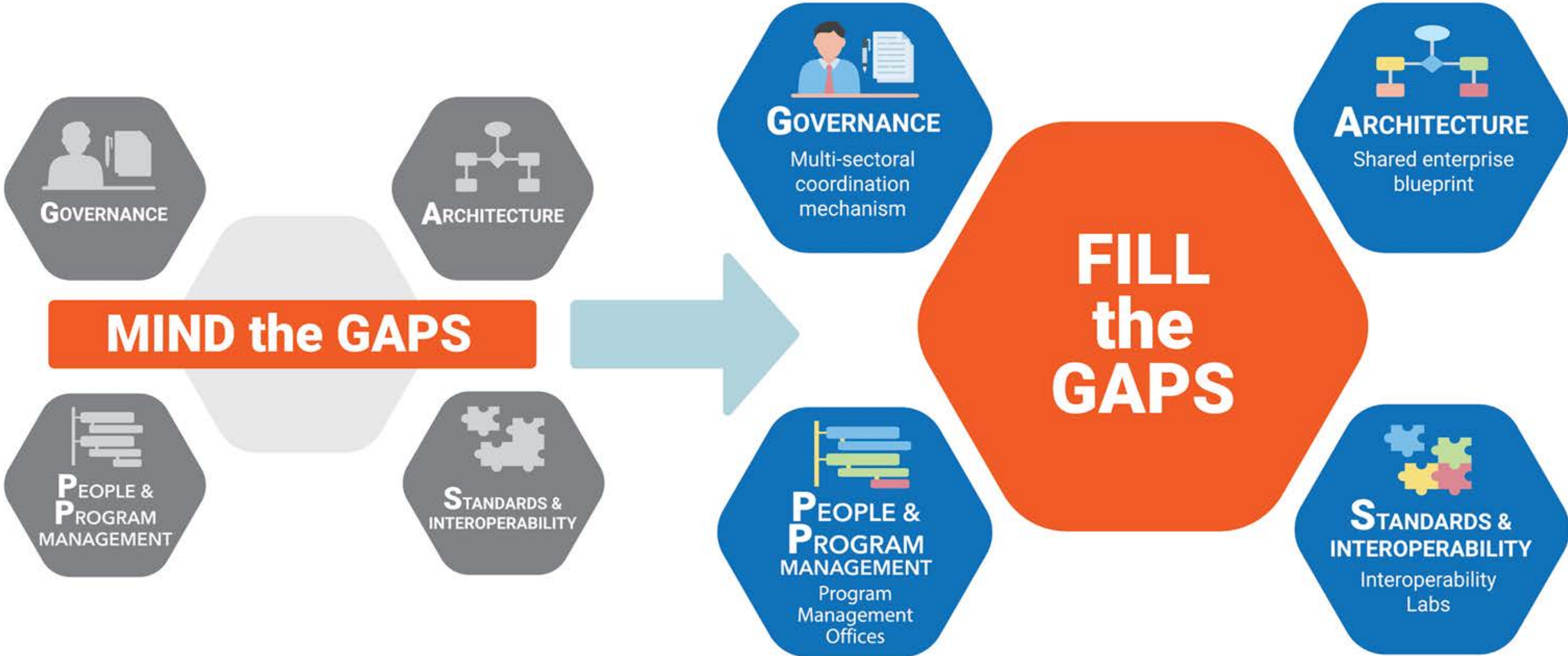
Alvin B. Marcelo

PS 3.4 Equity and Accountability in Digital Health and AI: Addressing Risks, Digital Health Foundation GAPS, and Advancing Open and Local Solutions

**The greatest opportunity—or risk—for fostering an enabling environment for equity and accountability lies in good governance.**

# AeHIN's MIND the GAPS & FILL the GAPS framework

# The Ten Commandments of Ethical Medical AI

1. It must be recognizable that and which part of a decision or action is taken and carried out by AI.

2. It must be recognizable which part of the communication is performed by an AI agent.

3. The responsibility for an AI decision, action, or communicative process must be taken by a competent physical or legal person.

4. AI decisions, actions, and communicative processes must be transparent and explainable.

5. An AI decision must be comprehensible and repeatable.

6. An explanation of an AI decision must be based on state-of-the-art (scientific) theories.

7. An AI decision, action, or communication must not be manipulative by pretending accuracy.

8. An AI decision, action, or communication must not violate any applicable law and must not lead to human harm.

9. An AI decision, action, or communication shall not be discriminatory. This applies in particular to the training of algorithms.

10. The target setting, control, and monitoring of AI decisions, actions, and communications shall not be performed by algorithms.
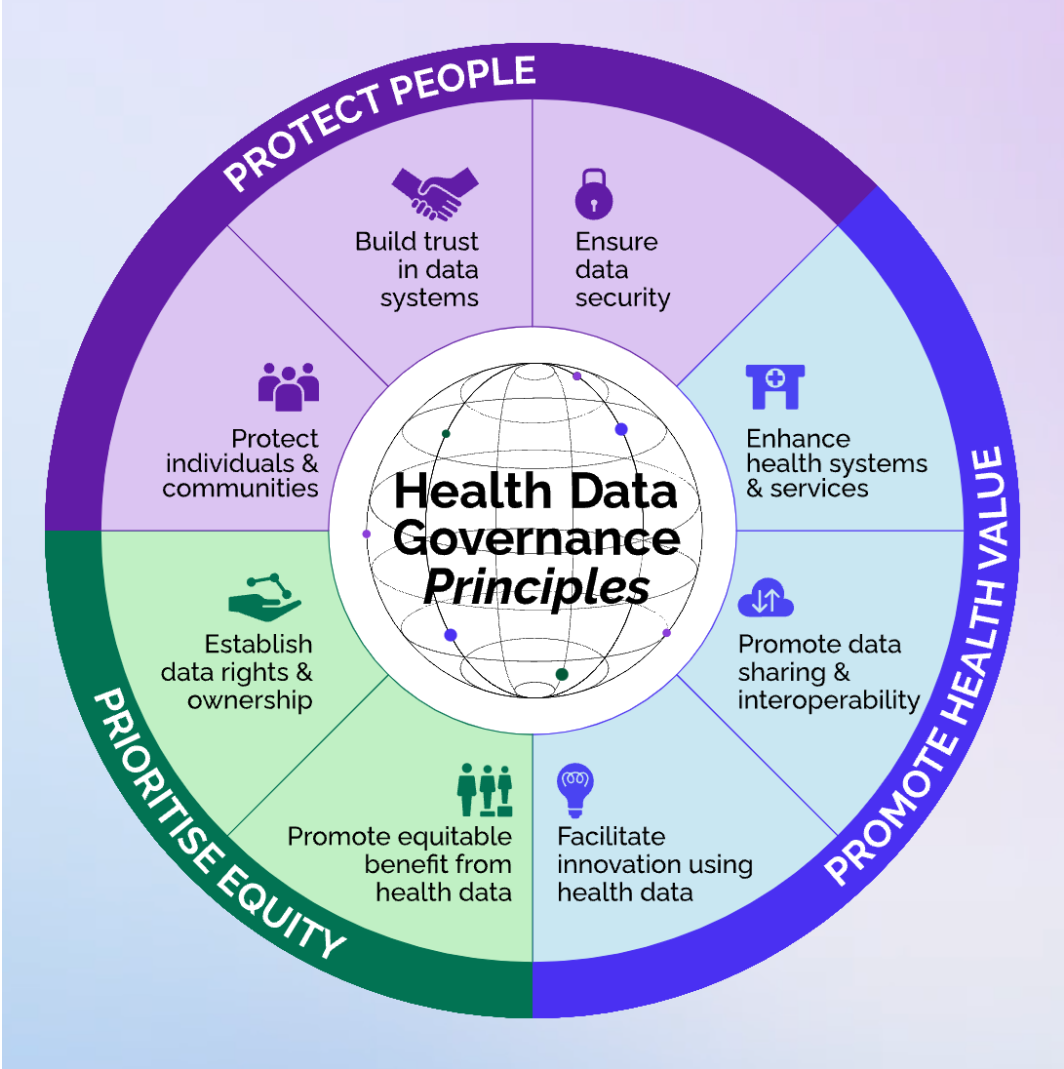
# Seven Sins of Medical AI

https://human-centered.ai/7-sins-of-medical-ai/

https://ec.europa.eu/eusurvey/runner/seven-sins-of-medical-ai?showecas=true

# Health Data Governance Principles ([healthdataprinciples.org](healthdataprinciples.org))
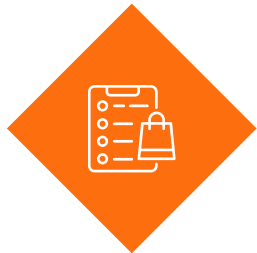
# The rationale for a Call to Action

### We have made significant progress

We have overcome many challenges in promoting digital health to improve healthcare access.
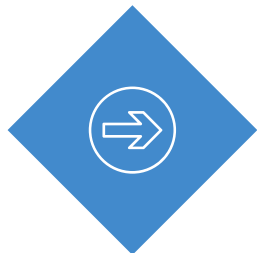
### Global and regional consolidation

A significant consolidation is happening worldwide to converge and utilize efforts and resources efficiently.

### Standardize the process

The possibility of having a standardized digital health improvement process that would promote consolidation and learning

### Collaborate and learn from each other

Cross-country learnings are an effective tool for progress and eventually promotes cross-border data and intellectual exchange.

### Monitor the progress

Having similar processes will help us monitor the progress in a structured way and enable easy allocation of resources.

### Grow together

We eventually grow together from whichever maturity level/stage we are, support each other leaving no one behind

# Key aspects

## 1.
**ACTIONABLE**

Each call to action has high-impact action items and activity steps to guide implementation

## 2.
**STANDARDIZED**

Standardize and emphasize the importance of key known aspects

## 3.
**UNIVERSAL**

Flexible for countries to start implementing irrespective of the current maturity level

## 4.
**RESILIENT**

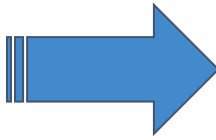Adaptable, irrespective of current and future digital health initiatives
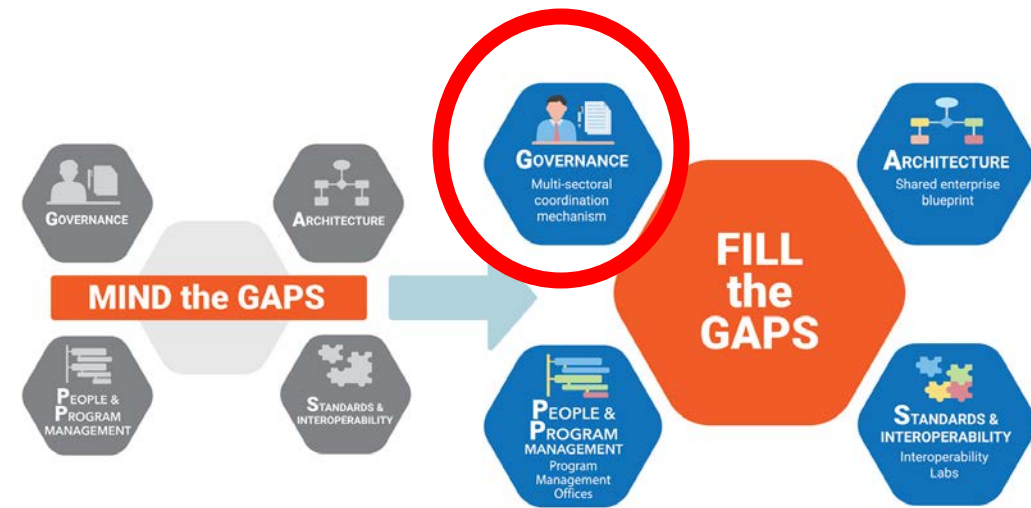
## 5.
**SUPPORTED**

AeHIN is open to supporting and guiding countries for implementation.

# AeHIN's MIND the GAPS & FILL the GAPS framework



→ # Call to Action: Governance

**Institutionalize a sustainable, inclusive, resilient, and collaborative digital health governance mechanism.**

**GOVERNANCE MECHANISM** — Establish a governance mechanism that ensures equitable access to digital health through multi-stakeholder coordination and global collaboration.

**GOVERNING BODY** — Institutionalize an independent governing body with a legislative mandate and defined structure and roles at national and subnational levels.

**CIO / CDHO** — Designate a CIO/CDHO responsible for coordinating the establishment of digital health governance mechanism and overseeing the national digital health program management unit.

# AeHIN's MIND the GAPS & FILL the GAPS framework
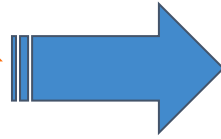


# Call to Action: Architecture

**Implement an integrated, standardized, and costed digital health blueprint that is aligned with national health and digital vision and strategies.**

**DEVELOP A BLUEPRINT**
Develop a simple and easy to understand digital health blueprint aligned with national health strategies, policies, priorities, and needs.

**ALIGN THE BLUEPRINT**
Align and disseminate the blueprint widely along with the country's digital/e-governance vision/strategy.

**FUTURE READY BLUEPRINT**
Ensure that the digital health blueprint is integrated and interoperable with both health and non-health systems and the blueprint is future ready and updated periodically for emerging healthcare and technology needs.

**COST THE BLUEPRINT**
Develop a time-bound comprehensive costed implementation plan based on the blueprint.
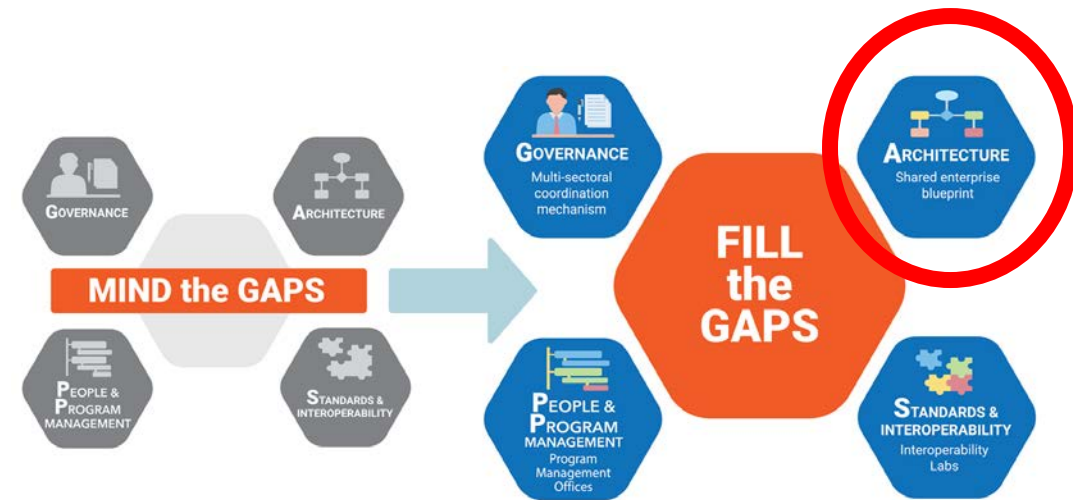
# AeHIN's MIND the GAPS & FILL the GAPS framework
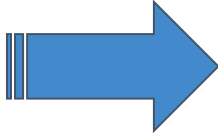


# Call to Action: Program Management

**Establish a national digital health program management unit or a digital transformation/collaboration office.**

**PROGRAM MANAGEMENT UNIT**

Institutionalize the national digital health PMU/digital transformation or collaboration office having diverse skilled professionals with defined terms of reference, organizational structure, and monitoring framework.

**DIGITAL COMPETENCY FRAMEWORK**

Adopt a digital competency framework to design and implement pre-service and in-service training on digital health and program management.
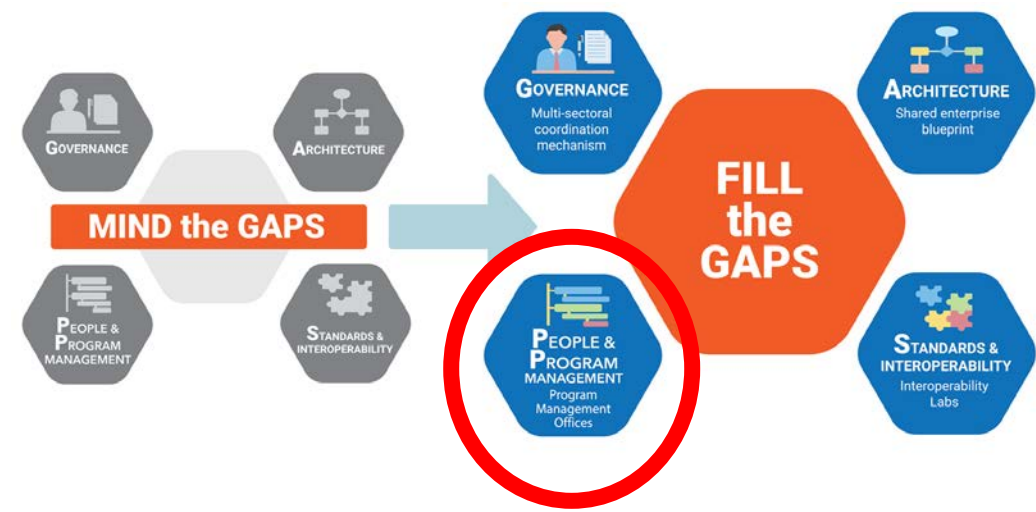
# AeHIN's MIND the GAPS & FILL the GAPS framework
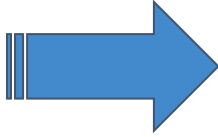


# Call to Action: People

**Advocate and implement measures to improve digital health literacy and use of digital health products and applications by families and communities**

**DIGITAL CULTURE**
Undertake advocacy campaigns to promote the use of digital tools and solutions that are responsive to the needs of families and communities, creating a 'digital culture.'

**USER FRIENDLINESS**
Enforce protocols for user-friendly digital health tools and education.
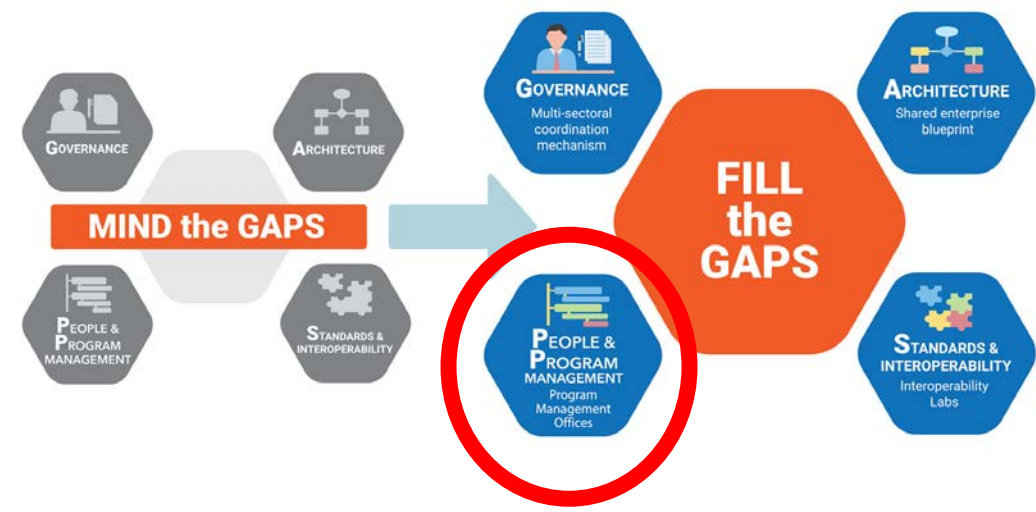
# AeHIN's MIND the GAPS & FILL the GAPS framework
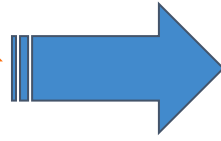


# Call to Action: Standards & Interoperability

## Achieve interoperability by adopting standards.

**TECHNICAL WORKING GROUP**
Establish a technical working group/committee on national health data standards to develop and create an ecosystem for adopting and promoting standards.

**DATA COMPONENTS**
Adopt proven standardized health data, minimum health data set, data dictionary, and the required middleware.

**INTEROPERABILITY FUND**
Create an interoperability fund to establish a sandbox and capacity building to promote standards.
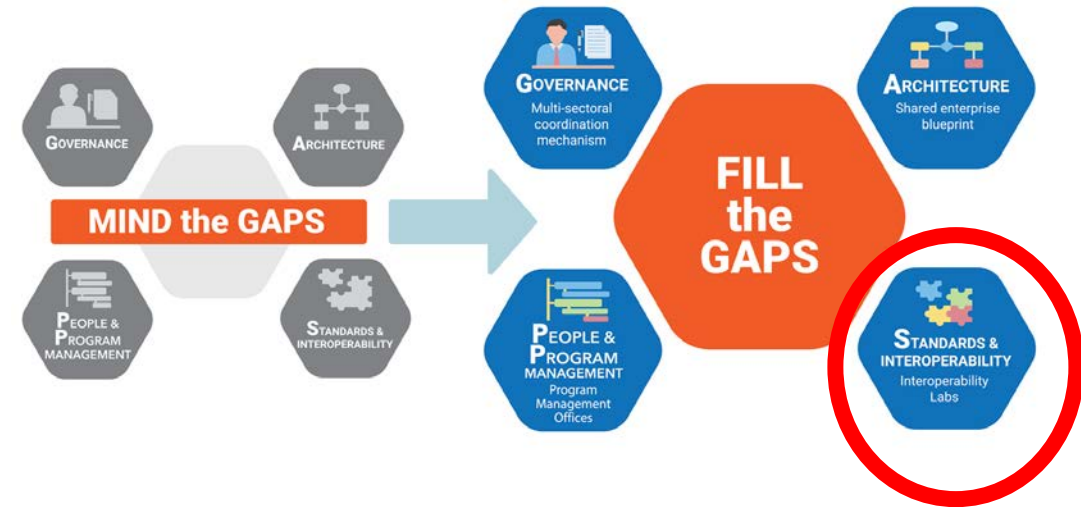
# Using GAPS framework and the Call to Action to identify gaps and actions needed for Convergence Workshop

**Conduct a current state assessment against the GAPS framework and the Call to Action**

**Customize and prioritize actions, if needed**

**Advocate for standardized implementation through leadership connect and multi-stakeholder convergence**

**Develop a time-bound costed implementation plan**

**Continuous follow-up > implementation > robust M&E on an outcome-based approach**

# Digital Health Convergence Workshops

AeHIN GAPS 2.0 Call to Action

**Download here:**



## CALL TO ACTION
## STRENGTHENING DIGITAL HEALTH ECOSYSTEM IN ASIA

The National eHealth Strategy Toolkit, a collaboration between the World Health Organization (WHO) and the International Telecommunications Union (ITU), provides a comprehensive framework and method for developing a national eHealth vision, action plan, and monitoring framework. It can be applied by all countries regardless of their current level of eHealth advancement. Thus, the toolkit addresses the changing dynamics of eHealth vision and implementation in a country. It emphasizes the importance of convergence, continuous support, and guidance from different health and non-health stakeholders. It also highlights the need for establishing effective governance mechanisms and strategic contexts for eHealth in countries.

The recently launched Global Initiative on Digital Health (GIDH), a WHO-managed network, highlights countries' need for support to move from product-focused digital health initiatives to setting up a national digital health infrastructure with appropriate national competency. This shift is essential to adapt to changing needs that require trusted and quality-assured technical support in addressing national digital health priorities, with the government in the driver's seat.

After carefully considering the regional needs through various interactions and workshops with in-country stakeholders, AeHIN identified four key challenges that, if solved, could lead to adequate eHealth/digital health vision, strategy, implementation, and sustenance in countries. The challenges relate to the need for (1) **G**overnance, (2) **A**rchitecture, (3) **P**eople and Program Management, and (4) **S**tandards and Interoperability or **GAPS** to manage programs and projects. Guided by the National eHealth Strategy Toolkit and a series of capacity-building and convergence workshops held across Asian countries, AeHIN launched the 'Mind the GAPS and Fill the GAPS' framework (aka GAPS framework), a summarized systematic intervention for governments to build and strengthen their national digital health development process.