



Government of Malawi

Digital Health and Interoperability: Country Good Practices

Health Data Collaborative Global Partners Meeting

15 December 2021



Government of Malawi
Ministry of Health

Digital Health Strategy 2020-2025

MAY 2020

The Ministry of Health Launched the
2020 – 2025 Digital Health Strategy on
17 Nov 2021

Objectives

Objective 1: Improved coordination of digital health investments to increase efficiency.

Objective 2: Establish a reliable ICT infrastructure that enables utilization of digital health systems

Objective 3: Build the capacity of clients, communities, health care workers, and IT personnel to participate in and benefit from digital health interventions

Objective 4: Leverage technology to increase access to and quality of service delivery

Objective 5: Improve security of information and ICT Systems

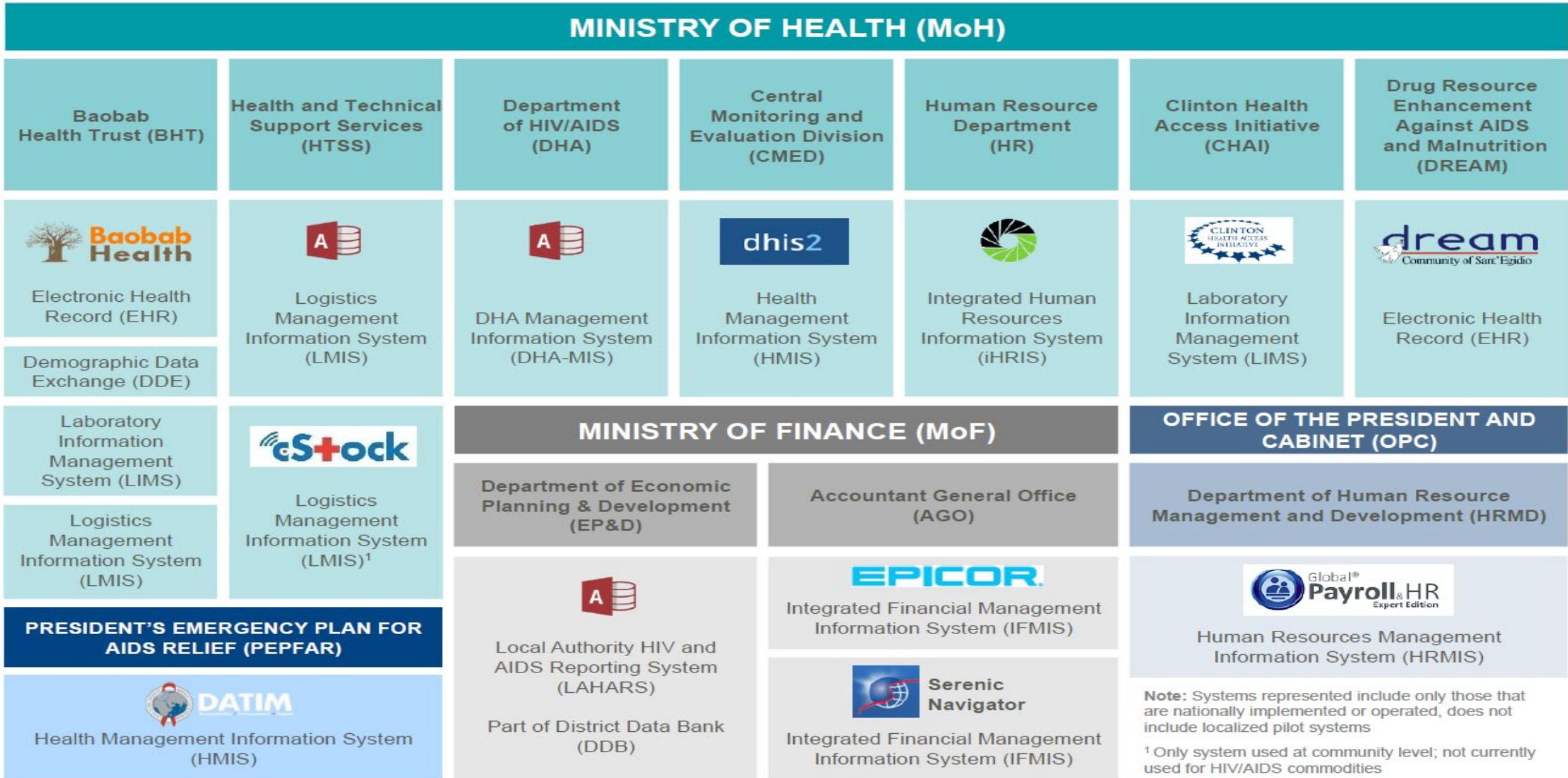
Objective 6: Promote interoperability of digital health solutions to enable information sharing for continuity of care.

Objective 7: Strengthen the sharing and accessibility of data across systems to enable use.

Concept of Interoperability

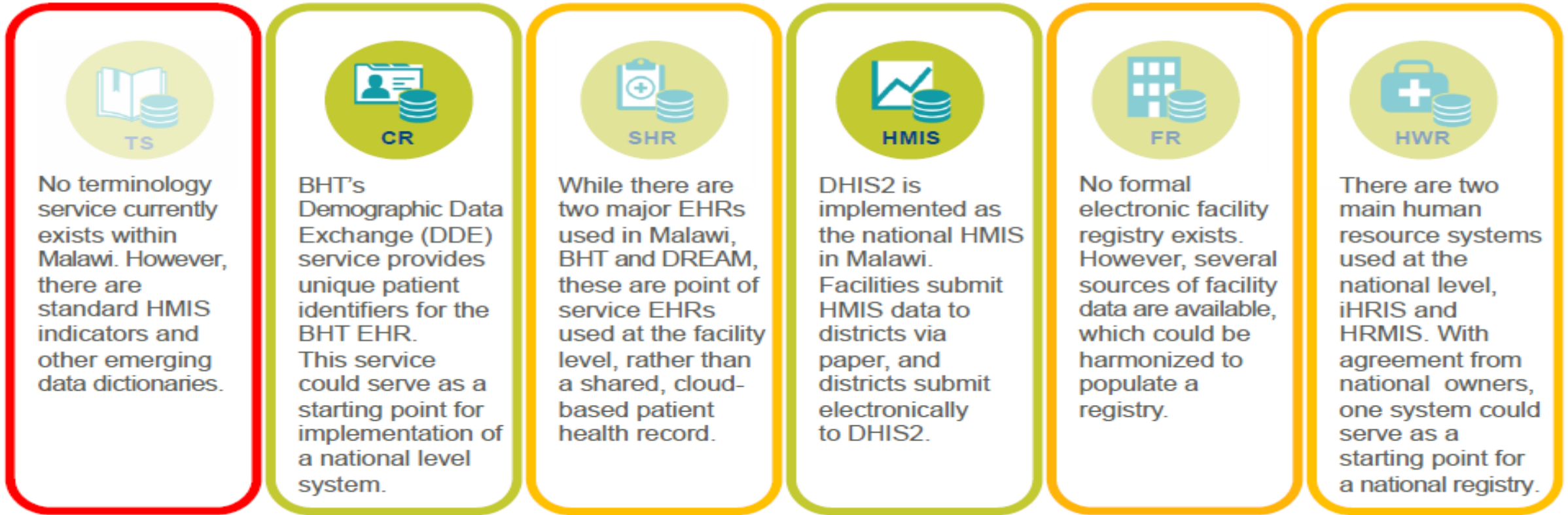
- Ability of a computer system to run application programs from different vendors, and to interact with other computers across local or wide-area networks regardless of their physical architecture and operating systems. Interoperability is feasible through hardware and software components that conform to open standards such as those used for internet.
- Interoperability means the ability of health information systems to work together within and across organizational boundaries in order to advance the effective delivery of healthcare for individuals and communities.
- **Interoperability describes the extent to which systems and devices can exchange and interpret shared data**

Best Practice 1: Understand the Ecosystem



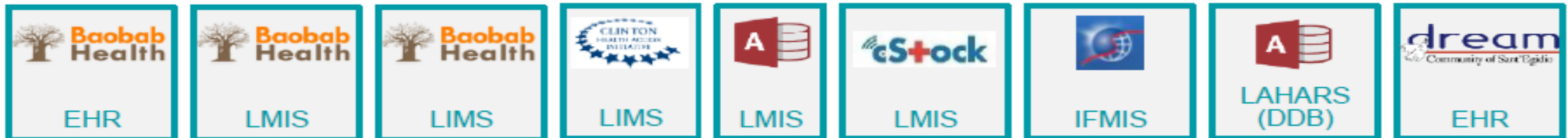
Best Practice 2: Understand the Gaps

Health Information Exchange Services



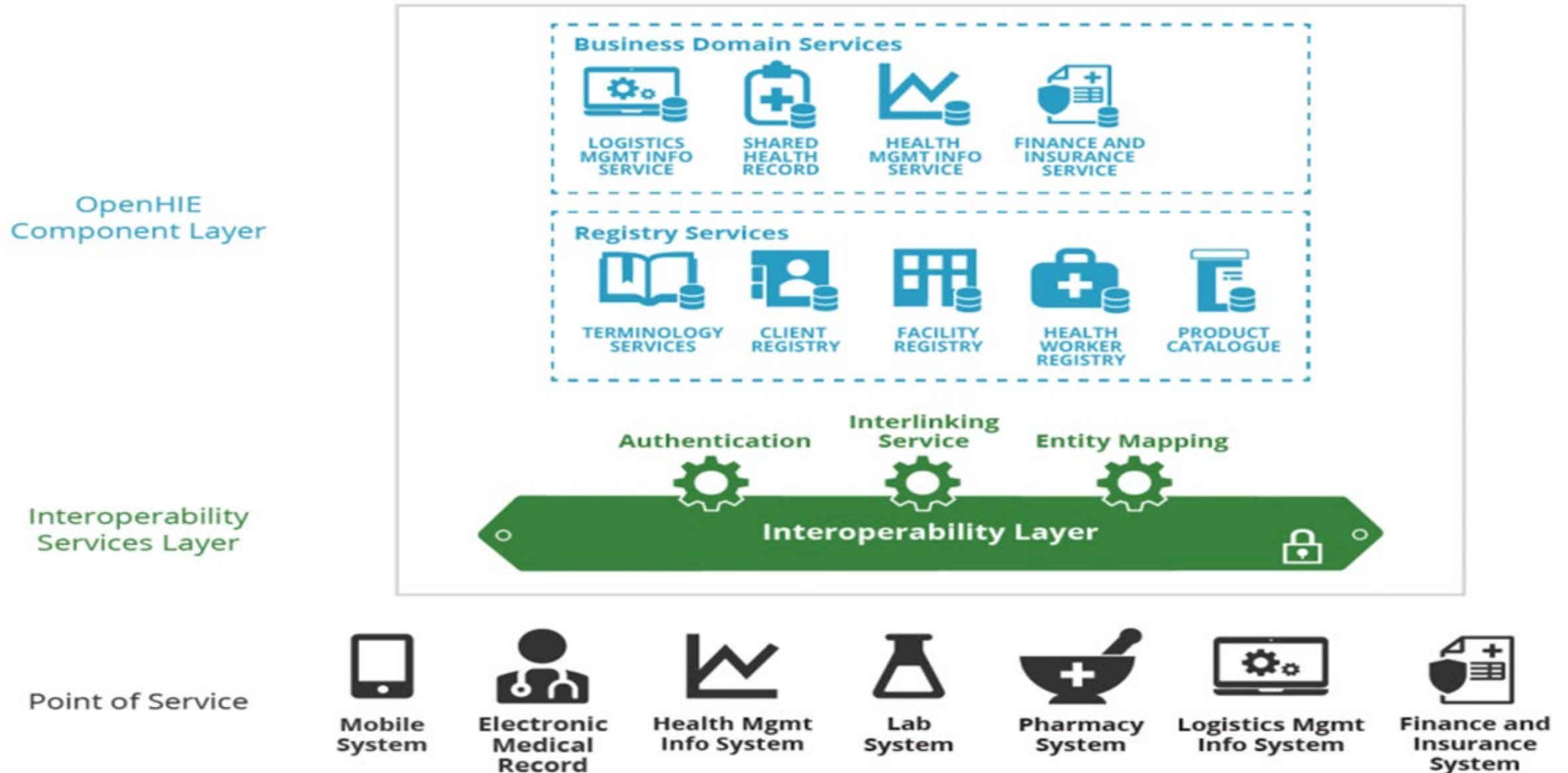
Interoperability Layer

Point of Service Applications



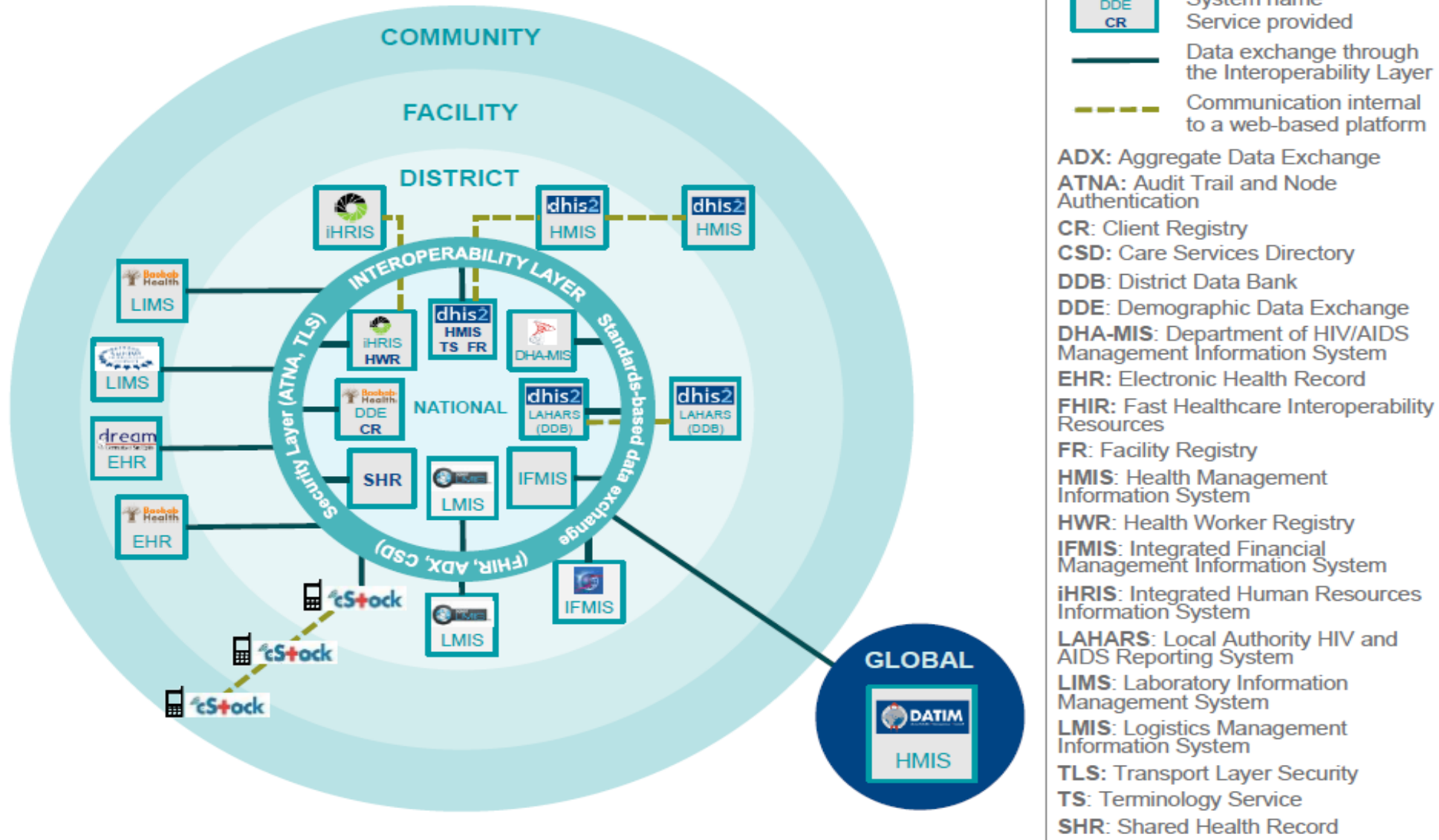
 = System that currently exists
 = System that exists but needs to be enhanced to act as a viable service
 = System that currently does not exist

Best Practice 3: Understand the Solution



Best Practice 4: Visualize the End State

Interoperability Layer manages secure, standardized data exchange between all national repositories and all points of service



Best Practice 5: Develop Specialized Systems Engineering Skills

- Interoperability is the new keyword
- Systems Engineers are available
- However, Everyone is learning or will need to learn

Best Practice 6: Need Standards/Guidelines

- Every sub system is not perfect
- Either system is not compliant
- Or business processes are not standardized eg
Classification of Health Facilities
- Either support standardization first or manage with the
whatever is available to start with (sometimes
standardization process can take long)

Best Practice 7: Be Government Driven

- Significant effort spent on partner coordination
- It is a slow process
 - Building each component requires time
- Key decisions need to be made along the way eg prioritization to speed the process eg start with Master Health Facility List (MHFL) and Interoperability Layer and other components to follow

Progress on Interoperability – 2021 Assessment

Domain	Sub Domain	Scores
Leadership and Governance	Governance Structure for HIS	4+
	Interoperability Guidance Documents	4
	Compliance with Data Exchange Standards	2
	Data Ethics	2+
	HIS Interoperability Monitoring and Evaluation	3
	Business Continuity	1+
	Financial Management	4+
	Financial Resource Mobilization	3+
	Human Resources	Human Resources Policy
Human resources capacity (skills and numbers)		2+
Human Resources Capacity Development		4
Technology	National HIS Enterprise Architecture	3
	Technical Standards	1
	Data Management	2+
	HIS Subsystems	2+
	Operations and Maintenance for Computer Technology	1
	Communication Network: Local Area Network and Wide Area Network	1
	Hardware	1

Thank You