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From Pilot to Population Impact: Scaling Digital Tools That Last

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CQUIN 9th Annual Meeting | Delivering Differently: Prioritize. Adapt. Sustain

Outline

- Introduction
- Digital Pivot
- Guiding Principles of Digital Health
- What is Digital Health?
- Digital Health Classification
    - Health Systems Challenges
    - Digital Health Interventions
- Digital Health Atlas
- Additional Resources

Introduction: The Funding Crisis

- With the recent funding crisis, the commitment to ending the HIV epidemic **by 2030** has never been more urgent.
- In 2025, member countries experienced the sharpest funding drop in two decades.
- The impact of the funding crisis resulted in supply chain disruptions, service delivery breakdowns, HRH crisis (over 140,000 layoffs), data and surveillance blackouts, and a decline in community-based and led services.
- At the height of the crisis, young volunteers in Ethiopia used patient-focused methods, created WhatsApp groups to check on their peers, mothers came together to support children's treatment, and youths used community radio to share health information (**UNAIDS 2025 Global AIDS Update**)
    - Digital interventions, scalable with the right tools

The Digital Pivot: From Crisis to Resilience

- According to the UNAIDS 2025 Global AIDS Update report, data-driven technologies, including machine learning and generative artificial intelligence tools, have shown promising possibilities in connecting people to the needed services and in supporting service delivery itself.
- Data-driven technologies have shown promise in
    - Predicting stockouts
    - Targeting high-risk groups to reduce interruption in treatment (IIT) and improve client retention in care.
    - Automating client follow-up
    - Providing self-paced HIV literacy
- As HIV response programs integrate digital technologies into healthcare delivery and community engagement, privacy, confidentiality, and other digital rights must be non-negotiable (**UNAIDS 2025 Global AIDS Update**)

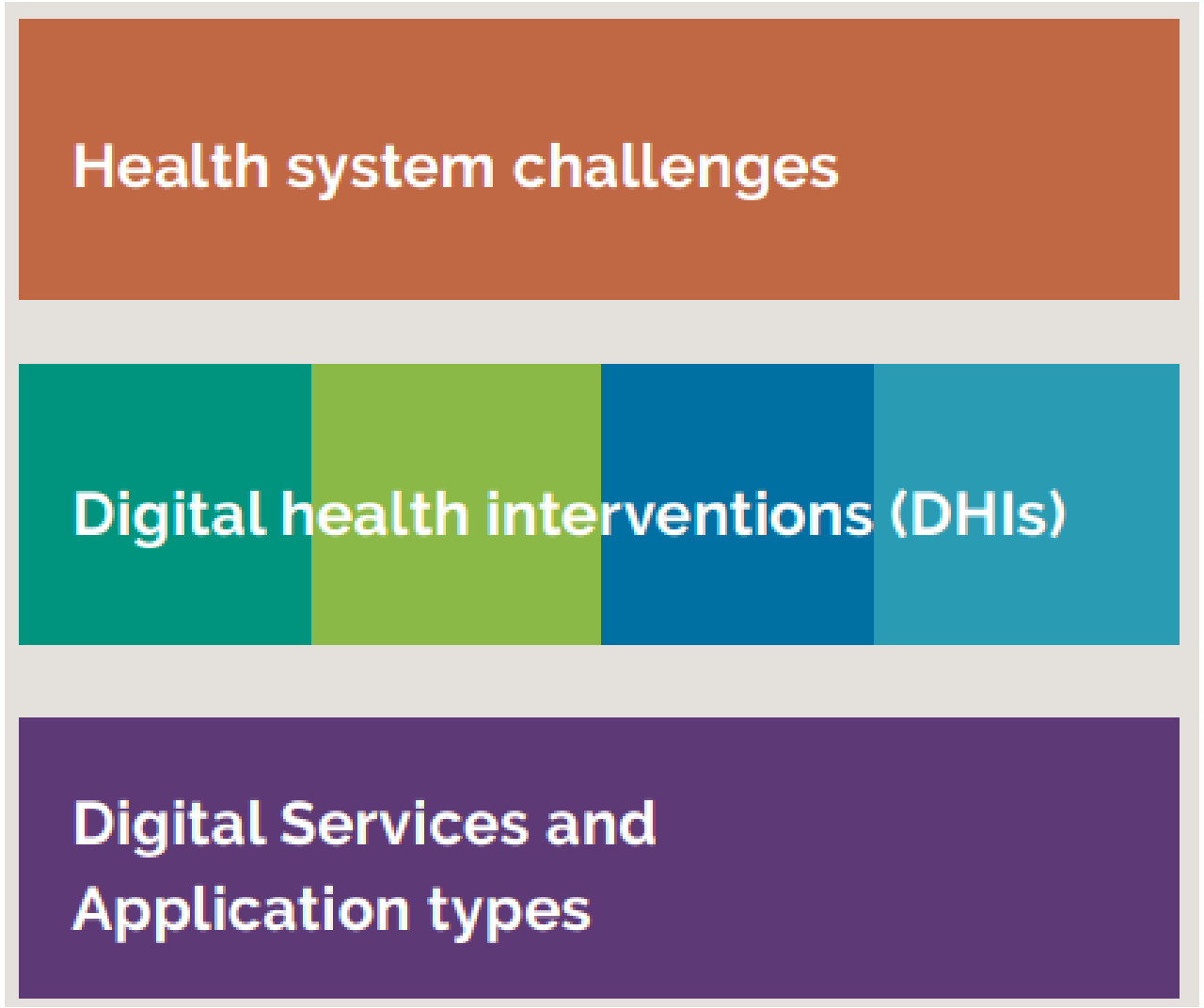
Principles of Digital Health Innovations

- Transparency
- Accessibility
- Scalability
- Replicability
- Interoperability
- Privacy
- Security
- Confidentiality

(WHO, Global strategy on digital health 2020-2025)

What is Digital Health?

Digital health is the systematic application of information and communications technologies, computer science, and data to support informed decision-making by individuals, the health workforce, and health systems, thereby strengthening resilience to disease and improving health and wellness (WHO, 2023)



Digital Health Classification

The classification of Digital interventions, services, and applications in Health is organized around three axes:

1. Health System Challenges
2. Digital Health Interventions
3. Digital Services and Application Types

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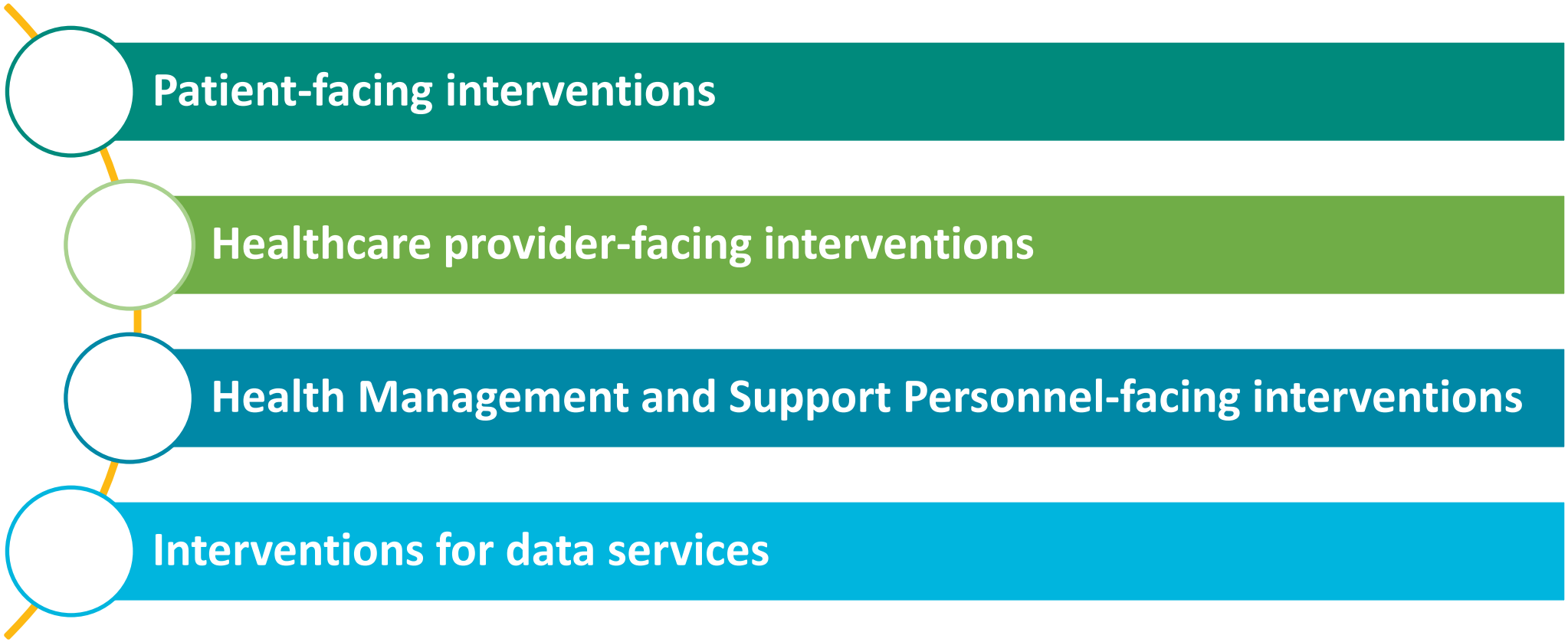
Health Systems Challenges

When classifying Digital Health Interventions (DHIs), Health System Challenges (HSC) should also be considered to highlight how technology addresses specific health challenges.

Digital Health interventions (DHIs)

Digital Health Interventions are organized into:



Digital Health Interventions for Persons

Name	Purpose	Country
AI health coach	AI chatbots, self-testing platforms, appointment reminders, and peer support	South Africa
BSmart SafeHub	connects users to sexual health education and services delivery across the continuum of care, as well as enabling real-time communications with health care providers and peers	Sierra Leone
My Safe Space (MSS) Mobile Application	Youth-centered service delivery approaches that strengthen engagement and retention in care. Integration of mental health and HIV services, supporting holistic, person-centered care.	Zambia

Digital Health Interventions for Healthcare Providers

Name	Purpose	Country
Predictive Risk Characterization	Mitigation of HIV Treatment Interruption Using Machine Learning: Predict, Prevent, and Re-Engage.	Kenya
Monitoring PLHIV with IVSA (DSH2 IVSA Tracker)	Enables efficient management of advanced HIV disease (AHD) cases by providing treatment sites with a secure web interface for entering and visualizing PLHIV patient monitoring data at varying access levels to support informed decision-making	Cote d'Ivoire
Telemedicine	HIV service delivery through real-time virtual clinical support and mentorship by linking peripheral HFs with specialists for case reviews and clinical decision-making for complex cases, including AHD.	Zambia

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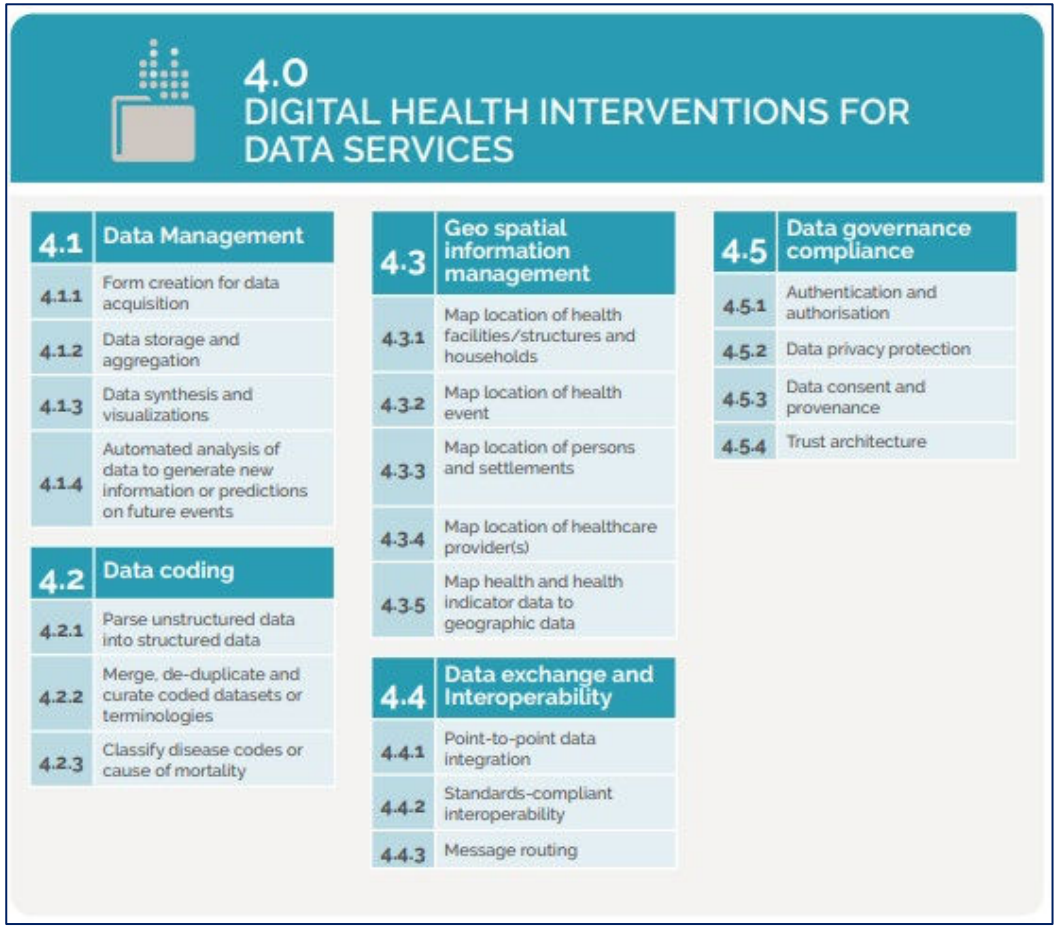
DHIs for Health Management and Support Personnel

Name	Purpose	Country
Integrated Technical Support Supervision	Tracks integrated health service provision for enhanced efficiency, effectiveness, and coordination, enabling critical supervision and mentoring of facilities during service integration.	Uganda

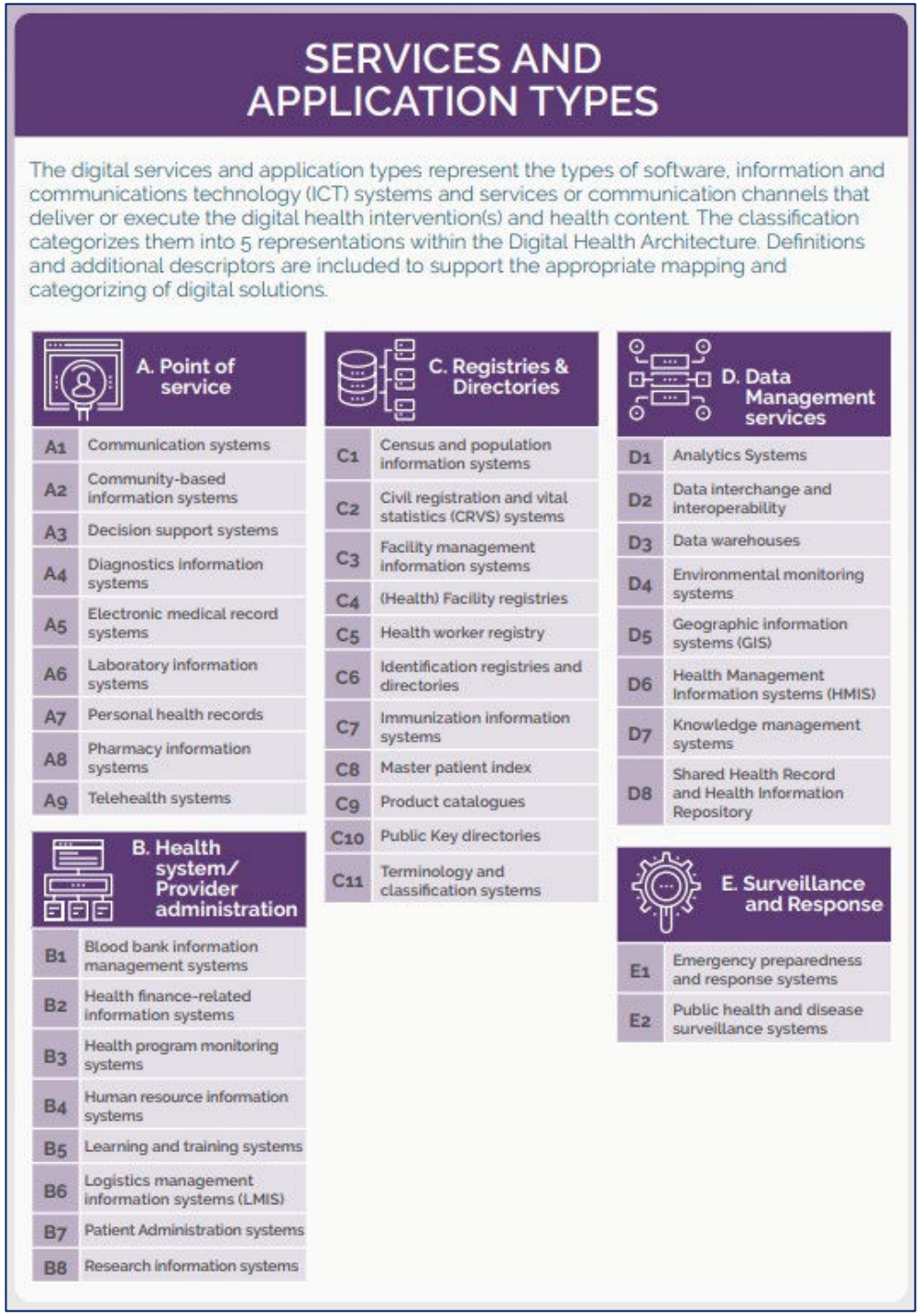
DHIs for Data Services

Name	Purpose	Country
Digitalizing HIS	Improve access, efficiency, and quality of care through centralizing health data through an integrated health information system.	Uganda

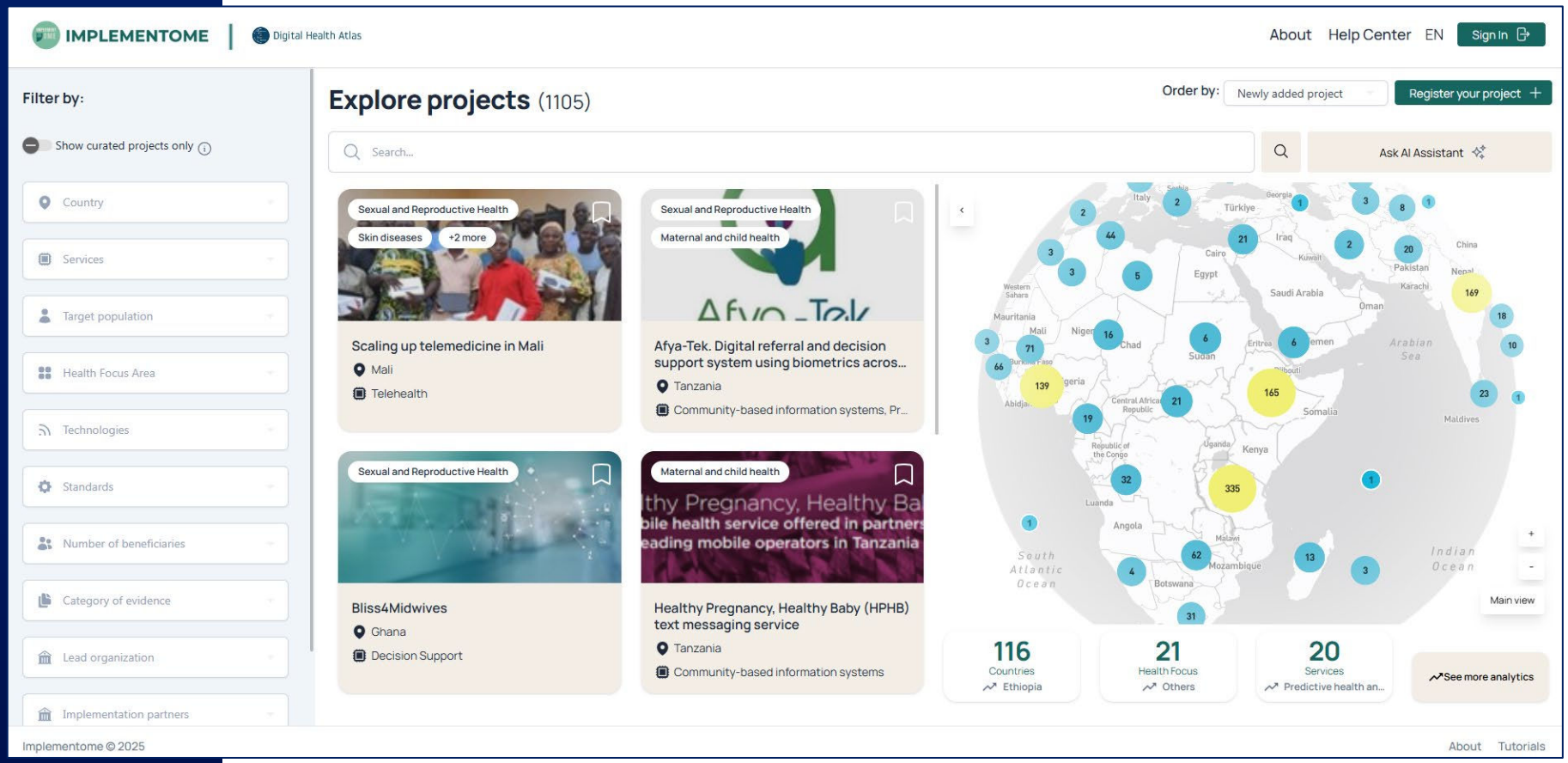


Services and Application Types

These represent the types of ***software***, ***information***, and ***communication technology*** systems and services or communication channels that deliver or execute DHIs and Health content.



Digital Health Atlas (DHA) for Registered Projects



- An online global repository where digital health projects are registered.
- The platform is designed to support governments, technologists, implementers, and donors to better account for and coordinate their digital health investments.

https://gdhub.unige.ch/implementome/projects/source/dha

Additional Resources

Ethics and governance of artificial intelligence for health: Guidance on large multi-modal models

January 2024

Classification of digital interventions, services and applications in health

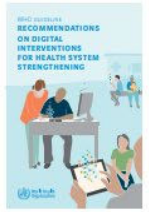
October 2023

Global strategy on digital health 2020-2025

August 2021

Digital implementation investment guide (DIIG): Integrating digital interventions into health programmes

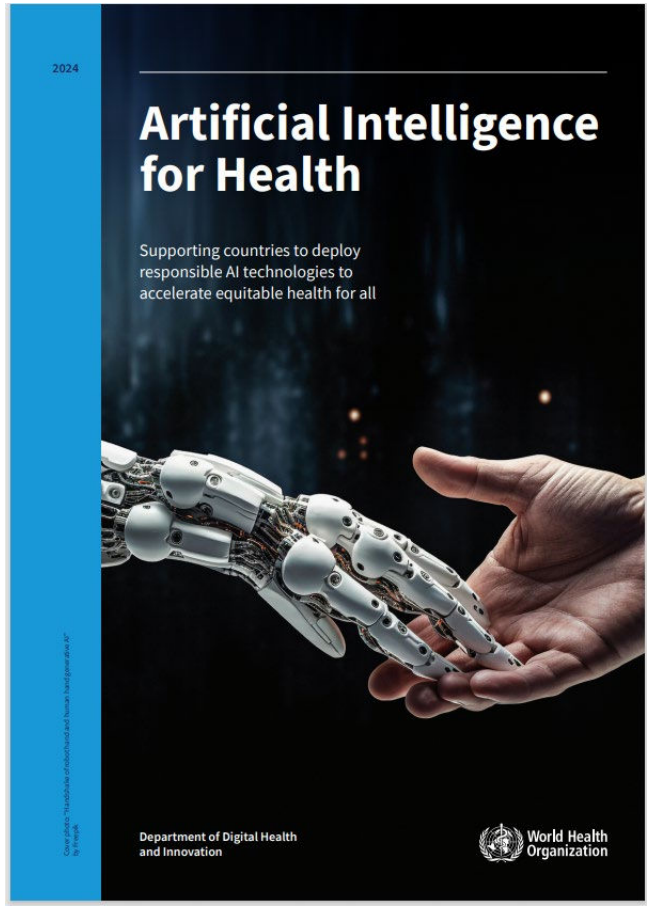
September 2020



WHO guideline: recommendations on digital interventions for health system strengthening

Digital Implementation Investment Guide (DIIG): Integrating digital interventions into health programmes

Digital implementation investment guide (DIIG): quick deployment guide



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Thank You