

ARMED E-HEALTH

Digitalization of national healthcare

Avet Manukyan, CEO

April 30, 2022



Table of Contents

- **The Role of E-Health**
 - Problems addressed
 - Solutions
- **ARMED**
 - History
 - Scope
 - Adoption
 - Integrations
 - Services
- **Health Informaticians**
 - Role
 - Value for the future

The Role of E-Health

The Role

Problems Addressed

Common challenges of countries:

- **Consolidation** of **patient health records**
- **Eradication** of substantial **inefficiencies** and **ineffectiveness** in national healthcare system

Inefficiencies include:

- **Increasing costs** of healthcare services caused by wrongly diagnosed treatments
- **Irrelevant procedures**
- **Fraudulent** activities
- **Non-optimal operational processes** (Patient-MO, Gov-MO, Payer-MO, etc.)

The Role

Solution

Effective National E-Health system:

- Provides an **infrastructure**, which connects vast number of stakeholders into a **collaborative network**
- Enables each to contribute to building a better public health
- Provides valuable **feedback with measurable metrics** on **effectiveness of implemented policies**, so that national policymakers can fine-tune decisions pursuing achievement of strategic goals.

Centralized **EHR data** enable

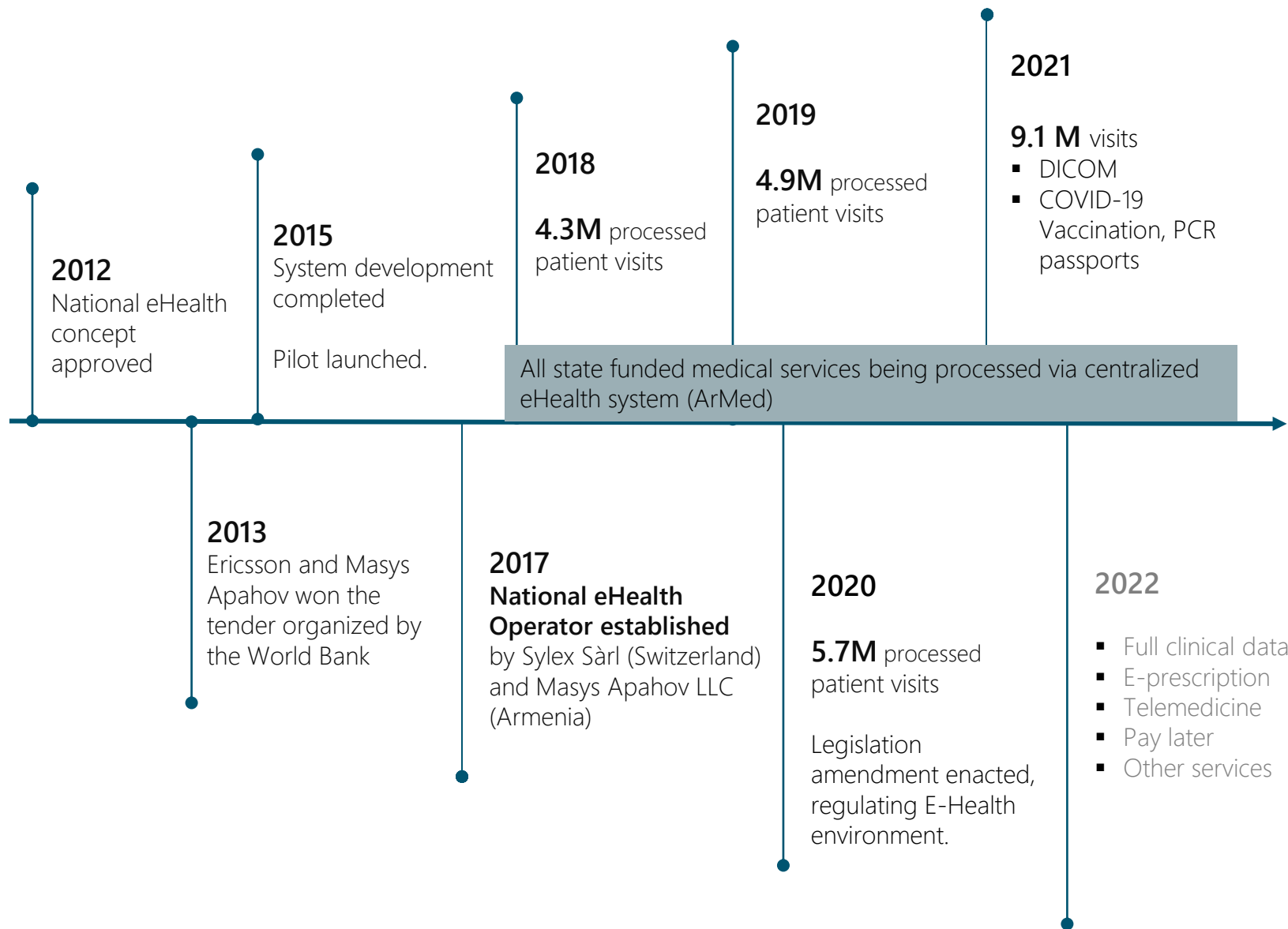
- Physicians an **immediate access** to their patient health histories
- **Lowering risks** of clinical errors.
- **Patients** to get **more control** over own care by accessing health records and services online.
- Tremendous **data mining** opportunities for **researchers, clinical trials** and **insurance actuaries** that increases effectiveness of entire industry and attracts **new investments**.

ARMED

History and Adoption

ARMED

History



ARMED

Scope of work

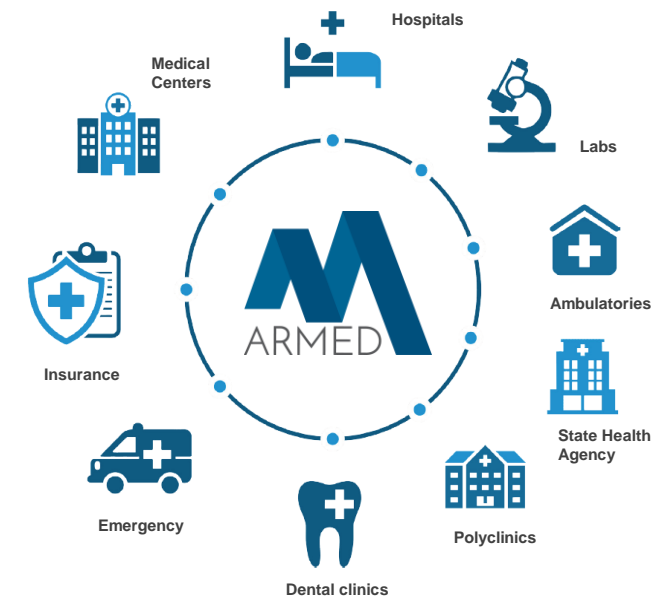
- Maintenance and support of Software and Hardware
- 24/7 support of users
- Trainings of users (ToT)
- Continuous development based on roadmap agreed with the government

ARMED

Adoption 2018 - 2021

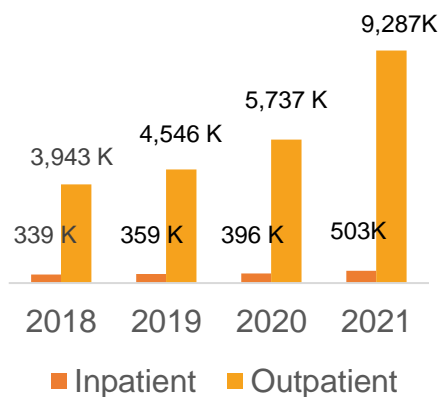
515 Subscribed organizations*

- 302 **Polyclinics and ambulatory clinics**
- 59 **Medical Centers**
- 71 **Hospitals**
- 39 *Dental clinics*
- 34 *Diagnostic Centers*
- 6 **Insurance companies**
- 1 *Sanitariums*
- 2 **Emergency services**
- 1 **State Healthcare Agency**

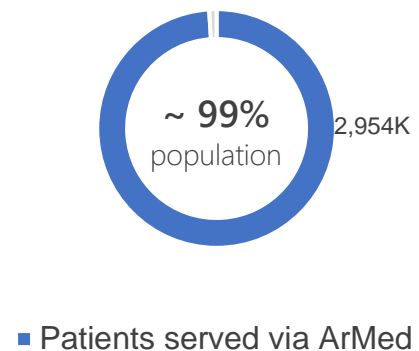


* Organization types highlighted in bold are 100% connected to ARMED as of 31-Dec-2017.

Registered patient visits



Patients served



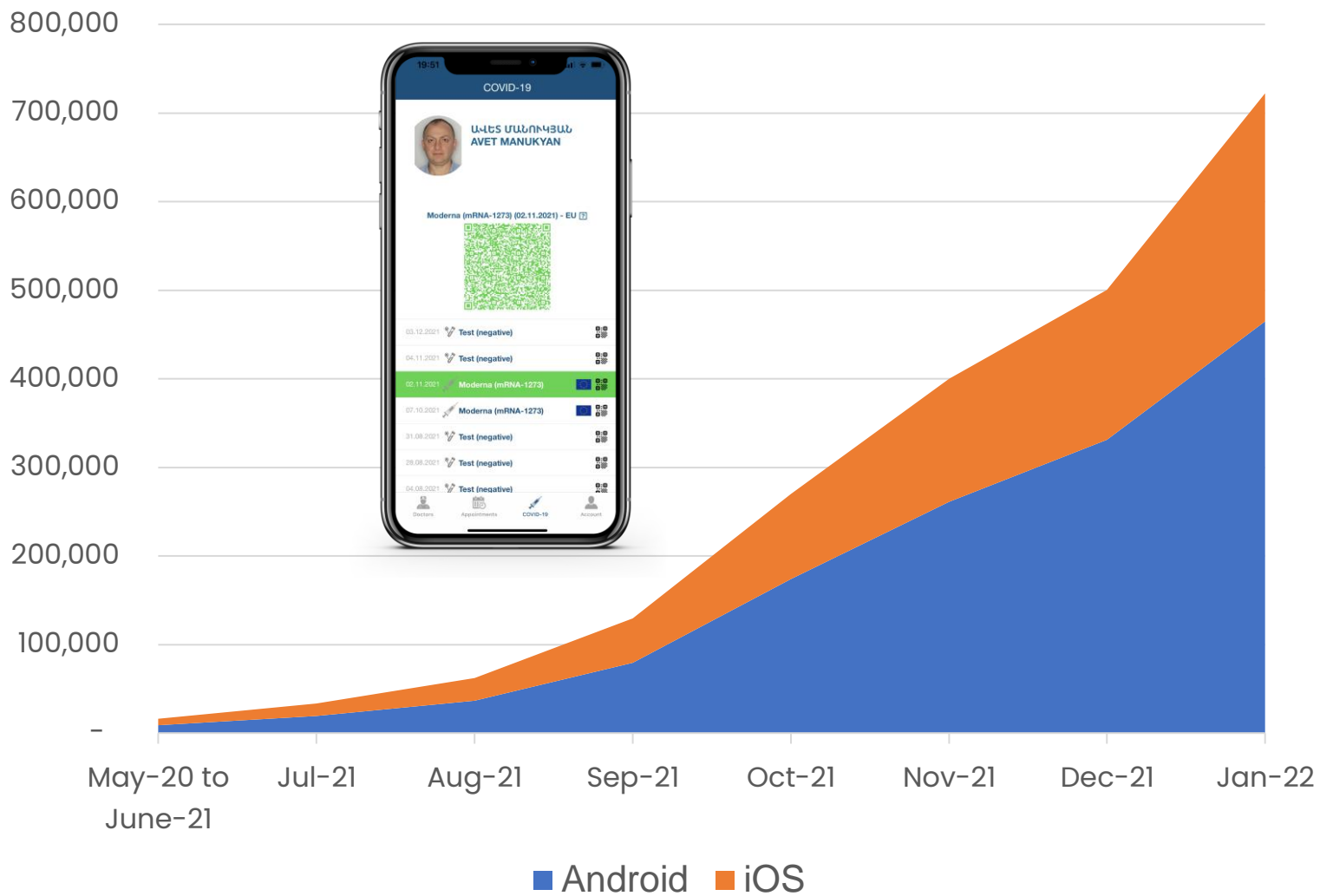
Call center



ARMED

Adoption 2018 - 2021

Total Audience of ArMed Mobile App

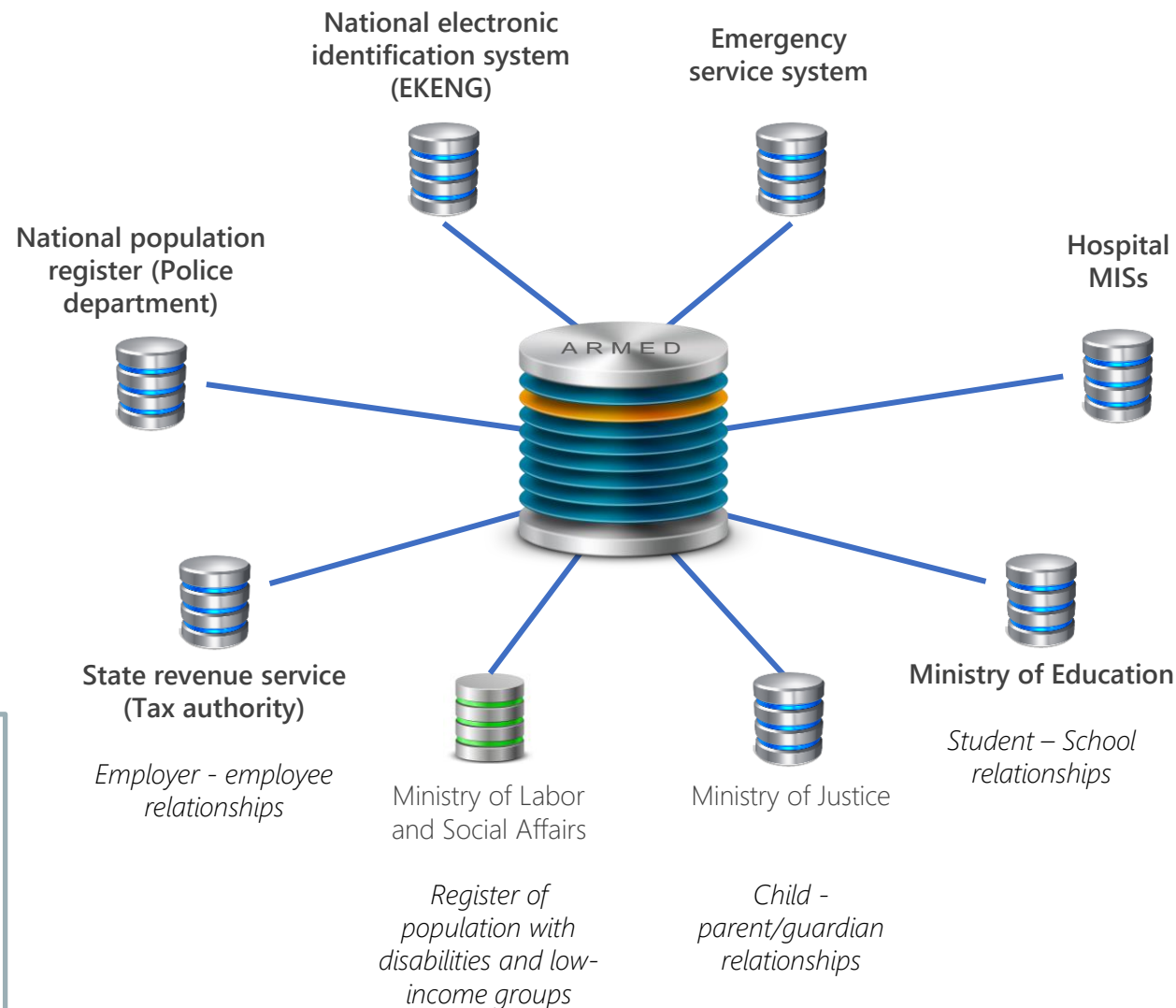
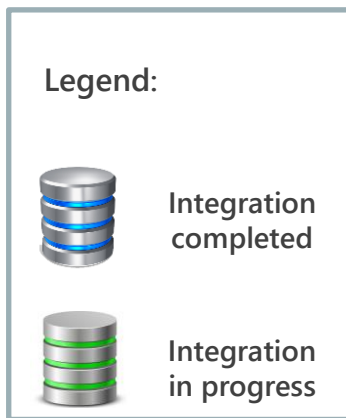


ARMED

Integrations and services

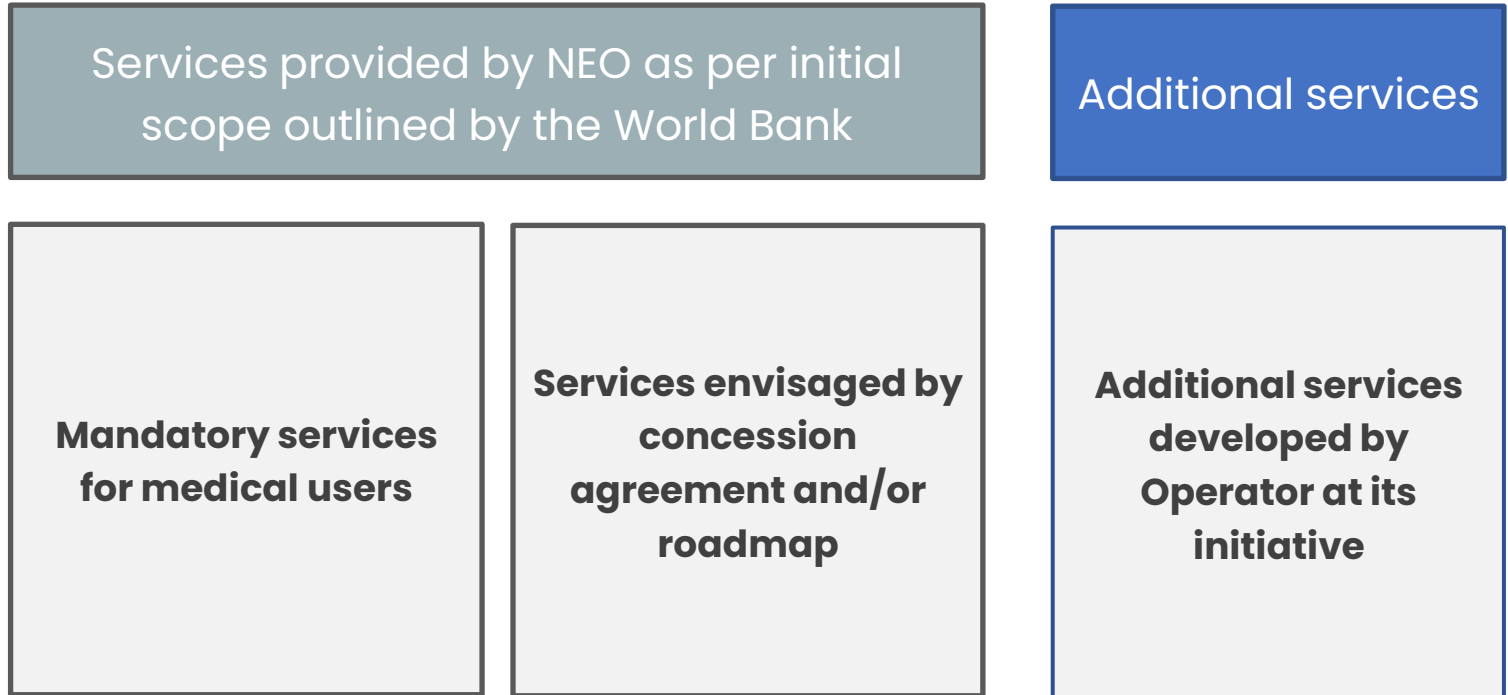
ARMED

Integrations



ARMED

Structure of services



ARMED

Current mandatory services

Mandatory services	Status & Adoption rate
✓ Registration of patient visits and services (funded by State Healthcare Agency)	100%
✓ Registration of patient visits and services (private insurance companies within social packages funded by state)	100%
✓ Registration of patient visits and services (funded out of pocket by patients or by insurance companies)	5%
✓ Patient attachment to local primary care facility	100%
✓ E-Referrals	100%
✓ E-Booking	90% of Yerevan

ARMED

Upcoming services envisaged by Concession Agreement

✓ E-Prescription

✓ Digitalization of temporary disability leave certificates

Status & Adoption rate

Pilot completed

Pilot completed

ARMED

Additional services

Additional services	Adoption rate
✓ Image storing and viewing (DICOM)	Operational
✓ Voluntary insurance claims processing	Operational
✓ Payment processing for medical services	Operational
✓ Vaccination inventory management, COVID-19 vaccination passports	Operational
✓ Digitization of medical journals and medical histories	In progress
✓ Telemedicine consultations by primary care physicians	Pilot completed
✓ Buy now pay later	In progress

ARMED

Additional services

Additional services	Adoption rate
✓ Healthcare workers information system	In progress
✓ Data portal for clinical trials	Not started
✓ Big data portal management	Not started
✓ Triage service for emergency and primary care	In progress
✓ Automation of clinical protocols	Not started

HEALTH INFORMATICIANS

Value for future healthcare

Health Informaticians - role

Adherence to standards

Health informatics tends to develop toward common standards relating to:

- Interoperability (HL7, FHIR)
- Security and privacy (ISO 27001, HIPAA, GDPR)
- Continuity of care (ISO 13940:2015)
- Coding and terminology (SNOMED, LOINC, ICD)

Development of competitive solutions

Within the established national framework, health informaticians will develop applications to serve various targeted needs.

ARMED will provide with the core environment to train, test and pilot data-driven solutions, applying AI technologies.

Critical resource for attracting health tech investments

Availability of specialists in health tech together with the national data warehouse (ARMED) creates stimulating environment for inbound investments in health tech, which has substantial potential to become a major export-oriented industry.

Thank You

Contact

Avet Manukyan
National E-Health Operator CJSC
Avet.manukyan@armed.am

