

E-21

PARTNERS

E-HEALTH

NATIONAL ELECTRONIC
HEALTH SYSTEM
Development Proposal



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PURPOSE OF E-HEALTH SYSTEM



Improved safety
for Patient



Improved health
services



Improved
availability of
health care



Extended rights
and possibilities
for Patient



Continued health
care



Enhanced
management
and resource
utilization



Increased public
awareness





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BASIC OBJECTIVES OF E-HEALTH SYSTEM

Creating a unified medical information space

Online access for consumers to appropriate medical services

Information support to meet the challenges in public medicine (PM)

Improvement of quality, safety and effectiveness of clinical practice

Providing consumers with online access to information

Efficient use of working time of doctors

Immediate provision of necessary administrative, medical and statistical information

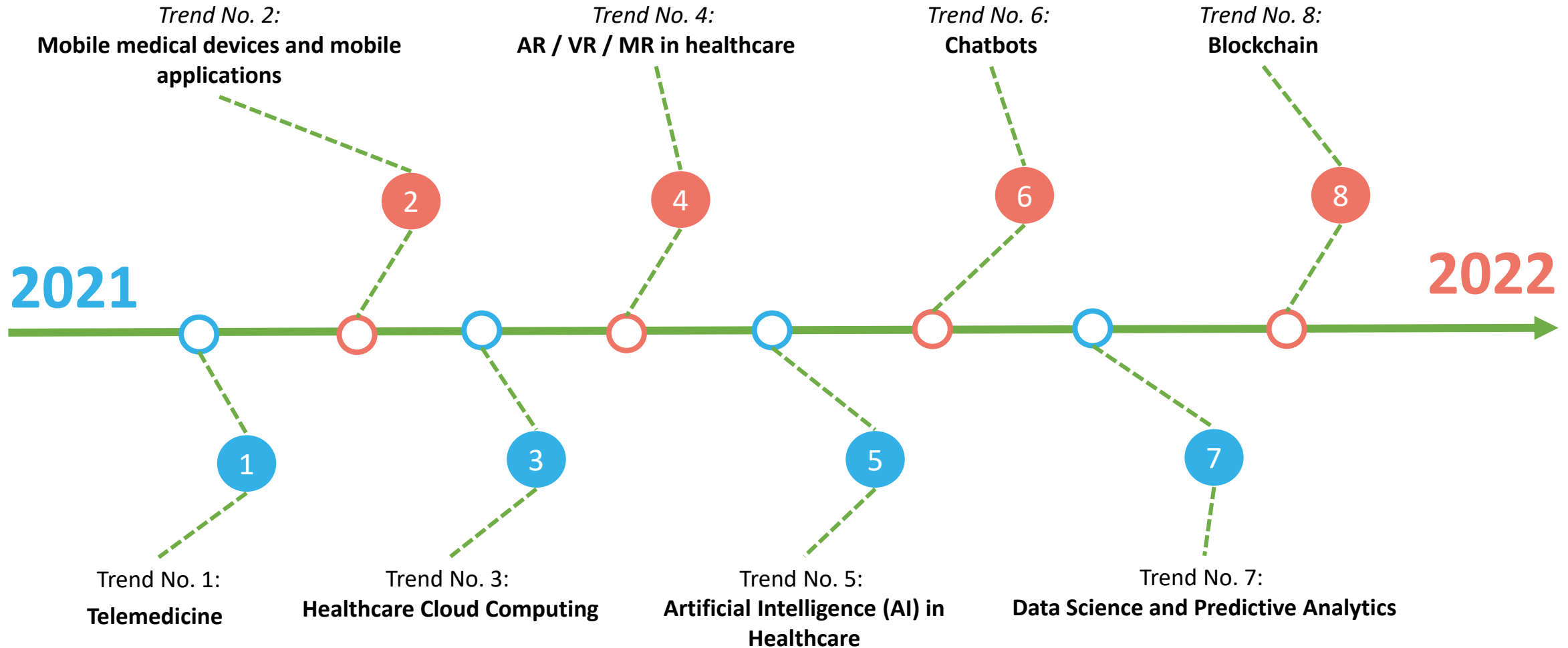
Information protection and security

Integration of e-health system with information resources of other departments

Improvement of information support for the activities of health care institutions

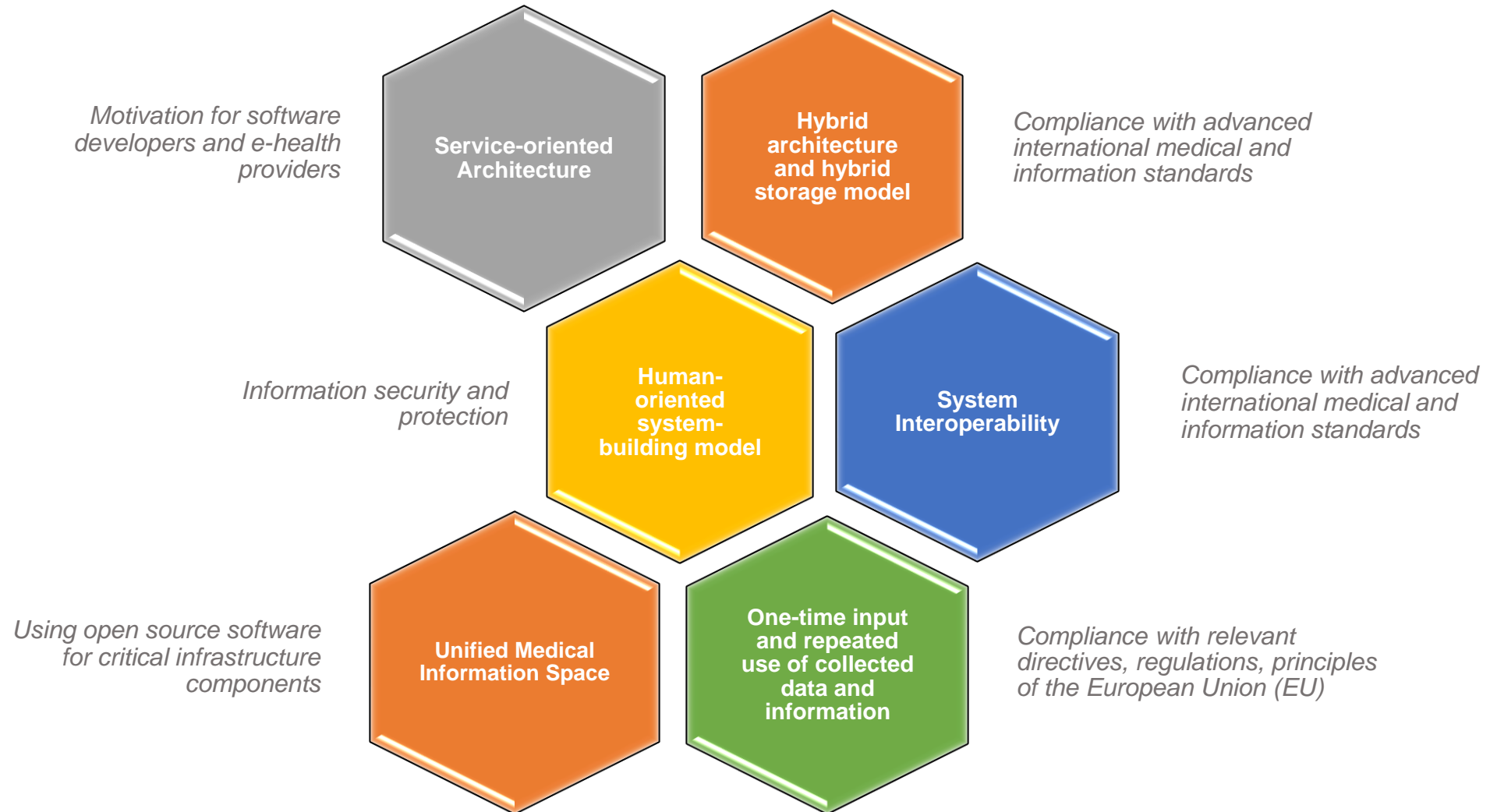


KEY TECHNOLOGICAL TRENDS OF E-HEALTH SYSTEM IN 2019



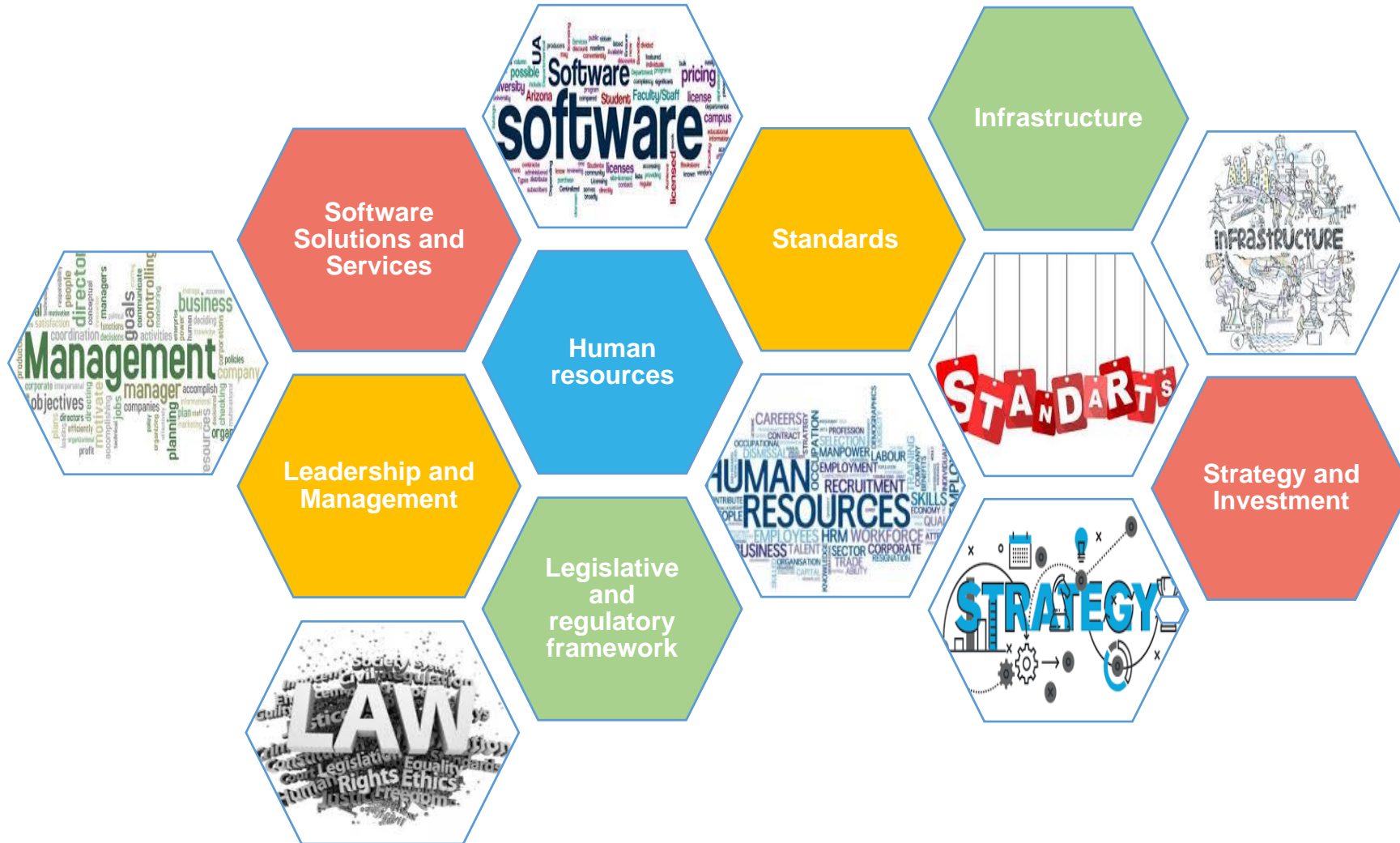


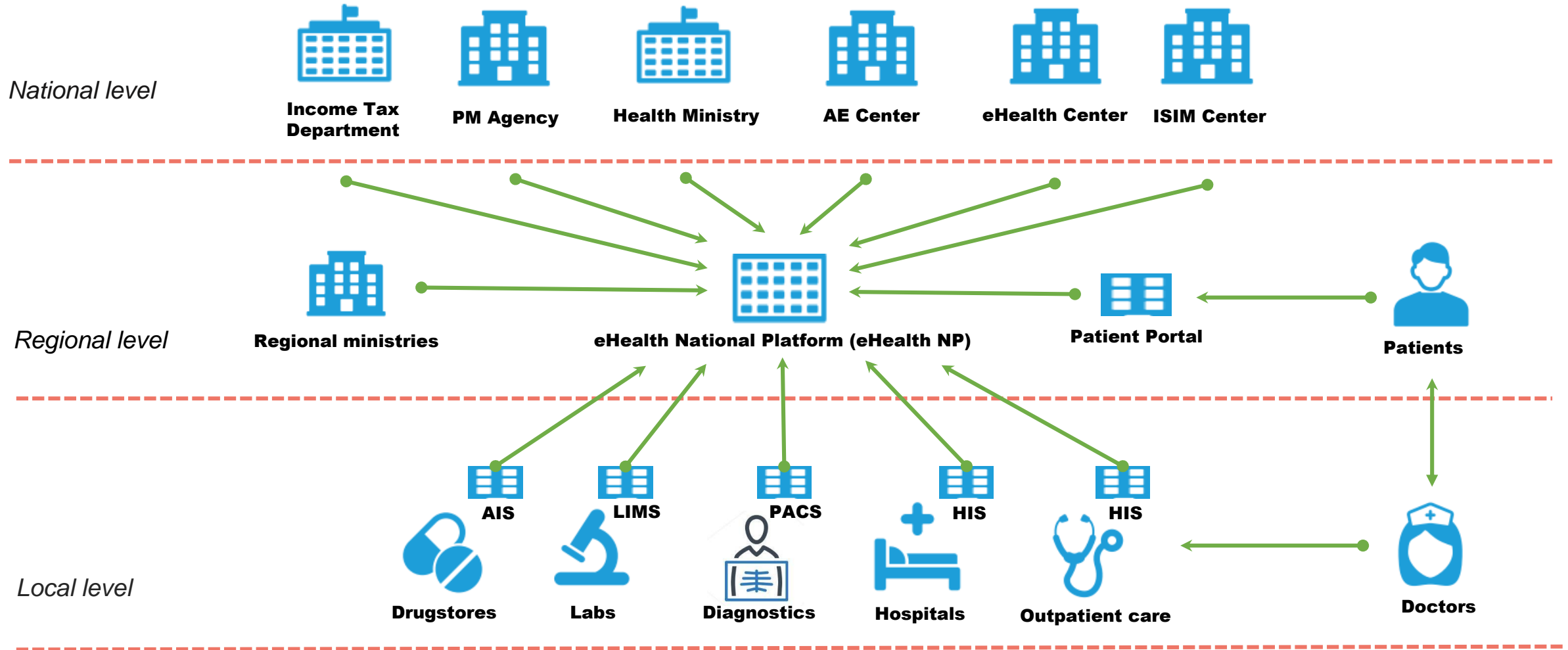
BASIC PRINCIPLES OF E-HEALTH SYSTEM





NATIONAL ENVIRONMENT OF E-HEALTH SYSTEM







Ministry of Health

Political goals, strategic planning, monitoring and evaluation of indicators, regulations



Health insurance agencies

Contracts for medical care and reimbursement, payment, monitoring compliance with requirements for use of funds, analysis of indicators of the quality of medical care.



Tax Service

Register of legal entities and individuals, key certification center



Centers for Healthcare Informatization

Leadership and management, investments, standardization, human resources, architecture, ensuring functionality of eHealth national platform (NP) decisions, collection, processing, storage and protection of eHealth NP data, eHealth NP infrastructure, certification function



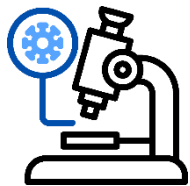
Certification Commission under the health

Certification of doctors and medical staff.



Centers for public health reform

Clinical protocols

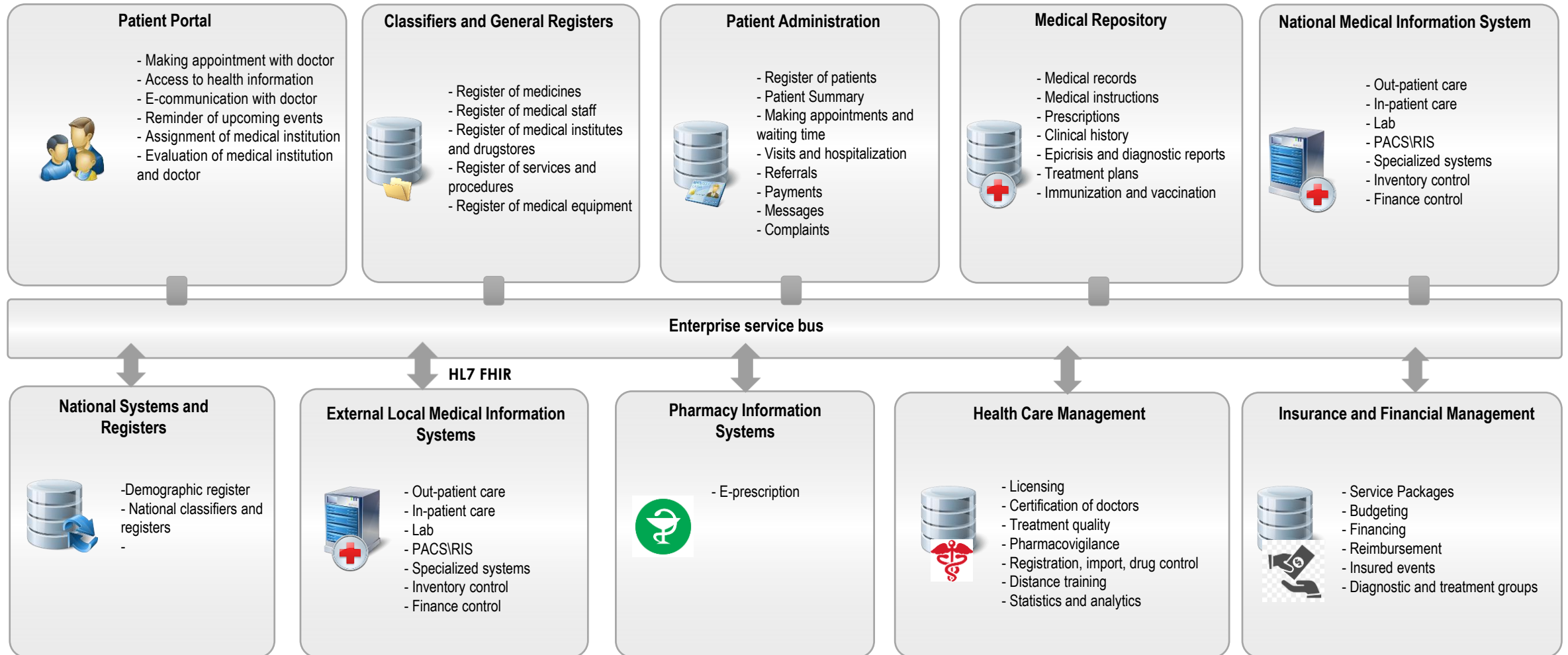


Analytical expertise centers

Register of medicines, pharmacovigilance, Import and control of medicines

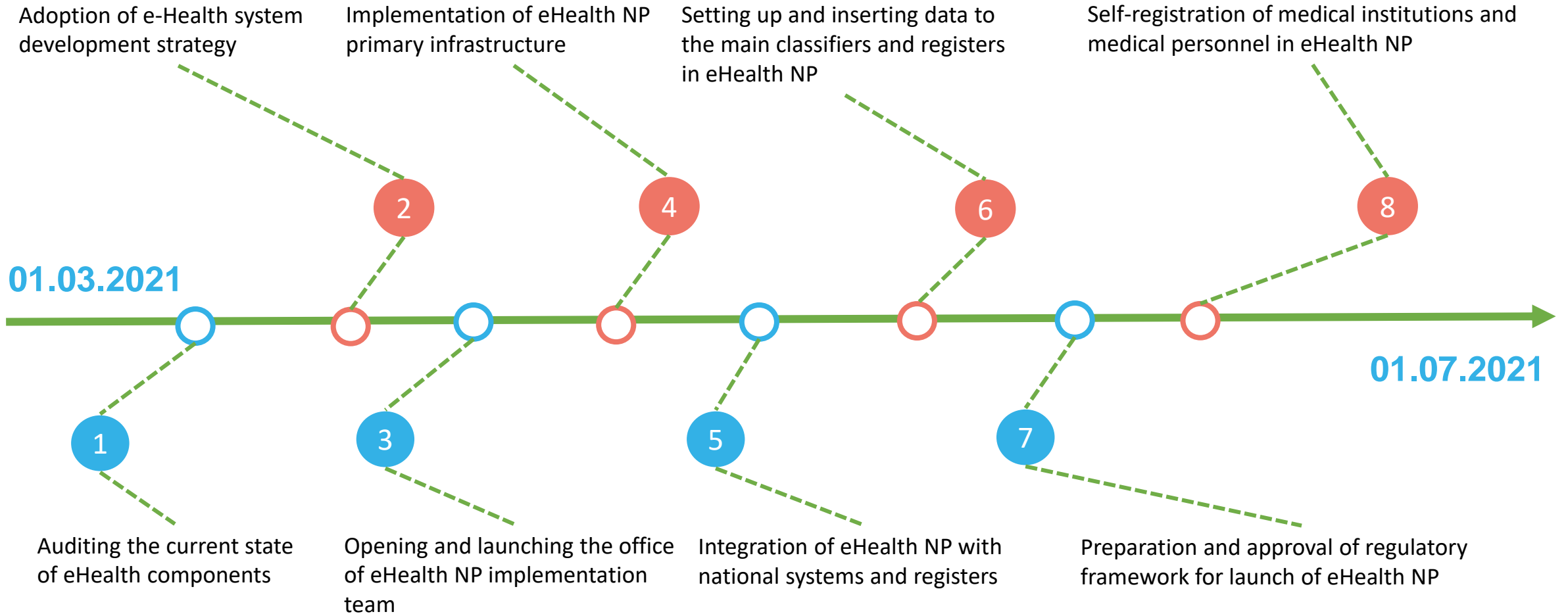


ARCHITECTURE OF E-HEALTH NATIONAL PLATFORM



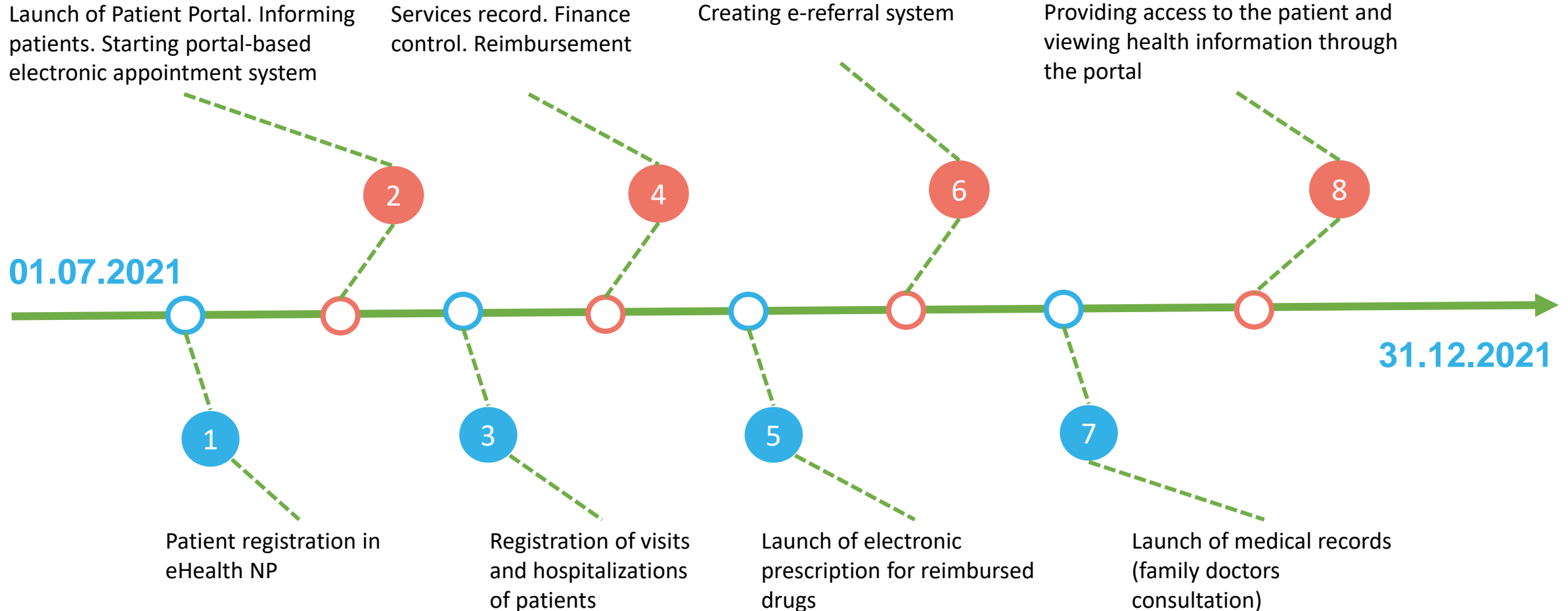


ELECTRONIC HEALTHCARE SYSTEM ROAD MAP (FIRST PHASE)





ELECTRONIC HEALTHCARE SYSTEM ROAD MAP (SECOND PHASE)





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Patients

+99 ths
per 1 doctor



Doctors

+1.54 per
per 1000 people



Hospitals

2-4
per 100,000 people



Beds

20-40
per 10000 people

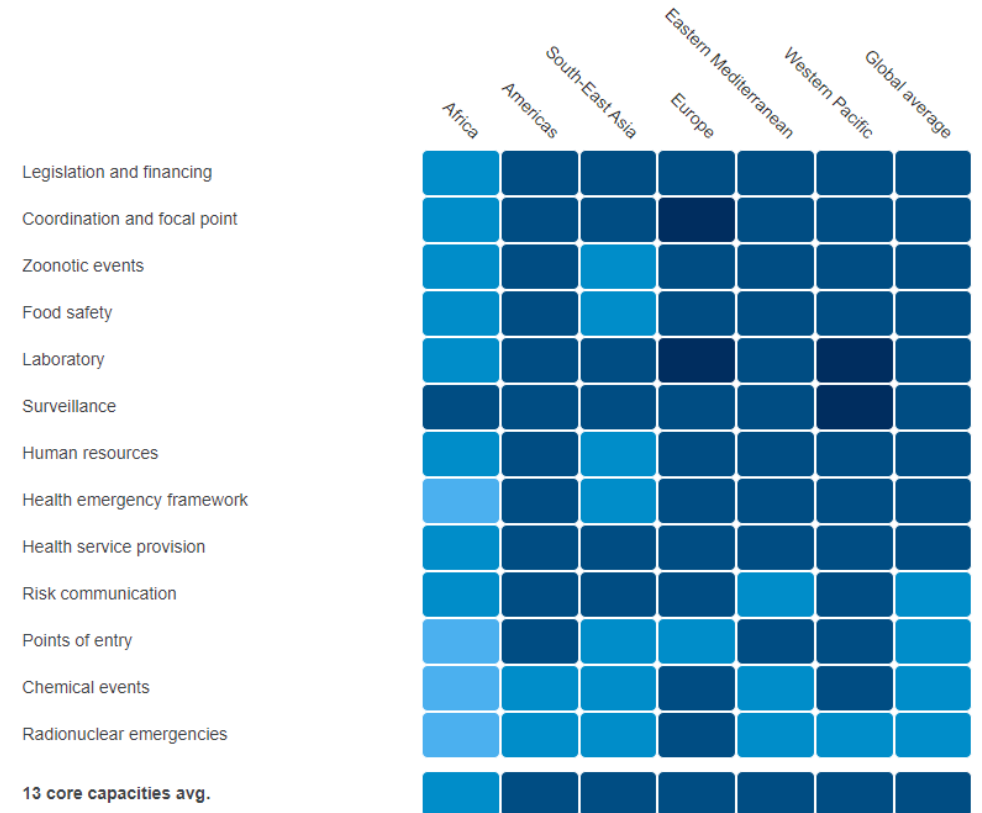
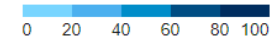


Drugstores

1250
per 100,000 people

KEY HEALTHCARE INDICATORS

International Health Regulation scores (2019)



Source: Electronic State Parties Self-Assessment Annual Reporting Tool (e-SPAR). Note: Data as of 17 April 2020. For updates, visit the Global Health Observatory.



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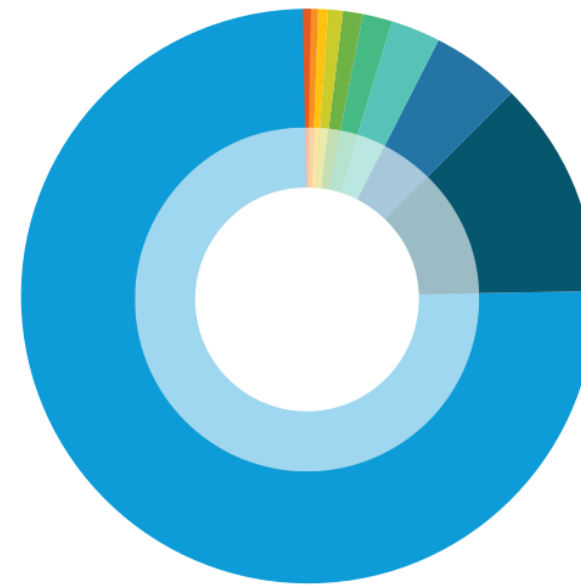
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E-health is the third largest sector in the European healthcare industry. E-health is becoming a new “industry” along with pharmaceuticals and medical instrument manufacture.

As an example from the CIS countries, the Ministry of Health and Social Development of the Republic of Kazakhstan (MHSD of the Republic of Kazakhstan), in accordance with the Decree of the President of the Republic of Kazakhstan dated September 13, 2004 No. 1438 “On the State Program for Health Care Reform and Development 2005-2010”, is developing a Unified Health Management Information System (UHMIS).

Between 2005 and 2015, the Ministry invested in UHMIS more than \$ 100 million for infrastructure (data centers, pilot project), more than \$ 50 million for services and applications, and more than \$ 10 million for consulting services. Percentage completed - 20%

STATE INVESTMENTS IN ELECTRONIC HEALTHCARE WORLDWIDE



STATE INVESTMENTS IN E-HEALTH, EUROS MLN

- Norway
EUR 150 mln
- Denmark
EUR 183 mln
- Finland
EUR 203 mln
- Sweden
EUR 347 mln
- Netherlands
EUR 430 mln
- Spain
EUR 713 mln
- Germany
EUR 1152 mln
- Great Britain
EUR 1980 mln
- Australia
EUR 4976 mln
- USA
EUR 30712 mln



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FINANCING MODEL OF ELECTRONIC HEALTH SYSTEM

Option 1

The Government finances the national platform linked to a patient database. This model is applied in a number of European countries which have the best indicators among the countries of the European Union (for example, Estonia).

Option 2

The Government finances the national platform without national medical information system.

Ensuring controlled competition for developers of local medical information systems for healthcare providers.

Public healthcare providers purchase systems from developers (licenses or SaaS model)



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EXPECTED E-HEALTH RESULT

Access to Services

- Medical services are provided with equal access and quality for each person living in Ukraine;
- Patients can find health care providers offering the services these patients need;
- Basic and enhanced services can be provided in rural and remote areas;
- Medical consultations with other doctors are possible using remote access
- Problems related to non-equal access to services can be monitored and detected.

Improved Efficiency of Healthcare Services

- More efficient human resources in the health sector due to reduction of repeated analyzes and studies, e-referrals and e-prescriptions;
- More efficient use of human resources in the health sector based on remote healthcare system;
- Timely medical care;
- Quick implementation of new methods of diagnosis and treatment in accordance with the healthcare standards.

Health Monitoring and Reporting

- Better monitoring and management of public healthcare services process;
- Easier analysis and health report;
- Higher reliability, quick receiving and processing of static medical information;
- Simplified and prompt medical information processing due to implemented terminological systems and coordinated international classifiers;
- Improved and optimized medical document management, patient flow management and accurate medical information;
- Reduced number of paper medical and static forms in healthcare facilities.

Access to Health Knowledge and Educational Resources

- Improved quality of medical education;
- More effective access to information sources of healthcare providers, including medical literature, educational, training and other resources;
- More effective access to information sources for healthcare consumers, including education and awareness-raising, as well as information on prevention of certain medical conditions;
- Principles of evidence-based medicine have been introduced;
- Improved international cooperation in the field of e-health through integration into international medical information networks.



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EXPECTED E-HEALTH RESULT

Quality and Safety of Medical Services

- Strict adherence by healthcare providers to best practices;
- Reduced number of adverse events;
- Improved possibility to monitor compliance with medicine treatment and other healthcare plans.

Planning and Management

- More effective access to quality data sources to fill resources;
- More efficient healthcare management, in particular, human resources, including information support for adoption of sound management decisions, automated monitoring of indicators of medical care quality, reliable prognosis and control of disease.

Enhanced Possibilities

- Active participation of people in monitoring their own state of health and treating chronic diseases through online access to Electronic Medical Records;
- Providing possibility to control one's own health;
- Easy access to reliable medical sources of knowledge.

Innovations and Growth

- Improved standardization of information exchange and communication between different segments, institutions and organizations;
- Additional opportunities for market innovation through access to a standardized and open e-health environment;
- Saving funds of the State budget of Ukraine due to optimized and intensive use of resources in the health sector.