

# Manifesto of Interoperability of IT Systems in Healthcare

The practical implementation of interoperability principles by IT service providers in healthcare faces numerous challenges, including:

1. **High Additional Fees:** IT service providers require healthcare facilities to pay significant additional fees to create interoperability conditions for systems, which significantly limits the ability to automate processes and introduce innovative solutions.
2. **Prolonged Implementation Time:** The time required by IT service providers to achieve interoperability is often extended, sometimes making it impossible to purchase a new system from a different provider.
3. **Restricted Data Access:** IT service providers impose restrictions on access to data collected in the system, which in practice makes it difficult to analyze the data or migrate to a new system where such analyses would be possible.
4. **Limitations on Meeting Specific User Expectations:** Healthcare professionals responsible for patient-centered medical processes require seamless collaboration across multiple medical and paramedical disciplines.

With the goal of rationalizing public spending, improving the efficiency of healthcare providers, and enhancing patient service quality through innovative technological solutions, the Polish Association of Private Hospitals (OSSP) believes that immediate action is needed to improve the current situation by regulating interoperability issues for IT systems in Polish healthcare facilities.

These actions should result in the adoption of a catalog of best practices for developing and using IT systems in healthcare. This would improve system efficiency and enable broader data analysis for patient benefit while ensuring adequate communication security, data confidentiality, and integrity.

OSSP maintains that this is **feasible within the framework of existing legal regulations** governing interoperability in public institutions, requiring only appropriate ministerial regulations.

According to Article sec. 1 point 4 of the Act of February 17, 2005, on the Digitalisation of Public Sector Entities, interoperability requirements also apply to independent public healthcare facilities and companies providing medical services under healthcare regulations.

These requirements have been specified in the Regulation of the Council of Ministers of May 21, 2024, on National Interoperability Frameworks, Minimum Requirements for Public Registers and Electronic Information Exchange, and Minimum Requirements for IT Systems.

Additionally, under Article 8d of the Act of April 28, 2011, on the Healthcare Information System, as amended by the Act of June 16, 2023, on Healthcare Quality and Patient Safety, we urge the Ministry of Health to immediately publish the draft requirements for common and secure open communication standards for consultation with healthcare service providers and IT service vendors.

OSSP asserts that such actions will be a significant step toward the national implementation of the European Health Data Space (EHDS) solutions.

At the same time, it is advisable to introduce, at this stage, a requirement in procurement processes for healthcare IT systems, ensuring that IT service providers include interoperability measures in the system's purchase price. These measures must enable integration with other IT systems and medical devices in compliance with the following principles.

Another critical issue is the terms of IT system supply for small and medium-sized public and private healthcare providers. These providers, despite being key stakeholders in the healthcare system, are vulnerable to vendor lock-in due to their fragmented nature. In this regard, OSSP proposes adopting minimum interoperability requirements for delivered IT systems, ensuring their monitoring and development through periodic evaluation (proposed every two years) to align with evolving regulations and market demands. Additionally, monitoring the pricing of offered solutions and the costs of horizontal integration should also be considered.

**The automation of data processing and integration of essential systems will increase operational efficiency, enhance patient access to services, and free up resources within healthcare facilities. It will also be a significant aid in efforts to improve healthcare system quality.**

**OSSP recommends that detailed actions should be based on at least the following principles:**

## **Openness and standardization of communication**

All medical systems, both commercial and public, must implement standardized API interfaces compliant with the OpenAPI specification. The Coordinating Unit appointed or designated by the Minister of Health provides a reference implementation of the integrated system, which serves as a model for implementing the standard and a platform for developing innovations. Commercial system providers retain the intellectual property rights to their solutions, provided that the standard API is fully implemented and detailed interface documentation is provided.

## **Reference system**

The Coordination Unit is responsible for maintaining and developing the reference system, which plays the role of:

- A pattern for implementing the OpenAPI standard in medical systems
- A platform for prototyping and validating new solutions
- A training and development environment for all stakeholders in the system
- Tools for verifying the compliance of commercial implementations

## **Documentation and standards**

Each medical system, regardless of the licensing model, must provide:

- Tools for verifying the compliance of commercial implementations
- Complete API documentation compliant with the OpenAPI specification
- A detailed description of data exchange methods for defined business processes
- Documentation of the database structure to the extent required for integration
- Compliance with implementation patterns defined by the Coordination Unit
- Documentation of security and data protection procedures

## Data transparency

The system guarantees controlled access to data and processes at all levels, supporting:

- Making decisions based on reliable data
- Development of solutions using AI
- Generating comparable statistics and reports
- Audit and quality control data
- Scientific research while maintaining patient privacy

## Collaboration ecosystem

The Coordinating Unit supports the development of the ecosystem through:

- Collaboration programs with universities and research units
- Commercial vendor certification system
- Comprehensive technical support for stakeholders
- Coordination of development and innovation activities
- Organization of training and workshops

## Security and standardization

The system ensures a high level of cybersecurity through:

- Simplification of the technology stack
- Reduction of architecture complexity
- Standardization of security protocols
- Regular security audits
- Incident detection and response mechanisms

## Development management

The Coordinating Team, operating in the public-private partnership formula, is responsible for:

- Development and maintenance of OpenAPI standards
- Reference system management
- Coordination of the work of all stakeholders
- Certification of commercial solutions
- Strategic planning of platform development

## Measurability and analytics

The system ensures:

- Standardized collection and processing of medical data
- Advanced tools analytical
- Measurable performance and quality indicators
- Reporting and data visualization mechanisms
- Support for scientific research and epidemiological analyses

## Support for innovation

The platform creates an environment conducive to innovation through:

- Open access to reference implementation
- Standardization of interfaces and protocols
- Simplified integration process of new solutions
- Support program for medical startups
- Test environment for innovative solutions

## Strategic development

The system implements strategic goals through:

- Building a coherent architecture of medical systems
- Development of digital competences of medical personnel
- Efficient use of resources
- Optimization of costs while maintaining high quality
- Support for digital transformation of healthcare

**OSSP recommends broad consultations on its proposal and invites all stakeholders of the healthcare system to cooperate, with particular emphasis on entities providing services for the protection of citizens' healthcare in Poland.**

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