The Eighth International Conference on Global Health Challenges
GLOBAL HEALTH 2019

Challenges in the implementation of a standard International Patient Summary (IPS) across EU countries

Panel discussion: New Trends in Citizen- oriented Services

Panelist: Professor Evgeniy Krastev, PhD

Faculty of Mathematics and Informatics, Sofia University St. Kliment Ohridski, Bulgaria

Short description

The draft European Standards **FprEN 17269** and **FprCEN/TS 17288** provide a detailed description of the IPS data set and a guidance for its implementation in citizen- centric services.

This panel discussion will focus on the challenges in the implementation of the IPS in four use cases.

Main Topics

1. A short description of the IPS
2. Use cases
3. Implementation challenges

1. A short description of the IPS

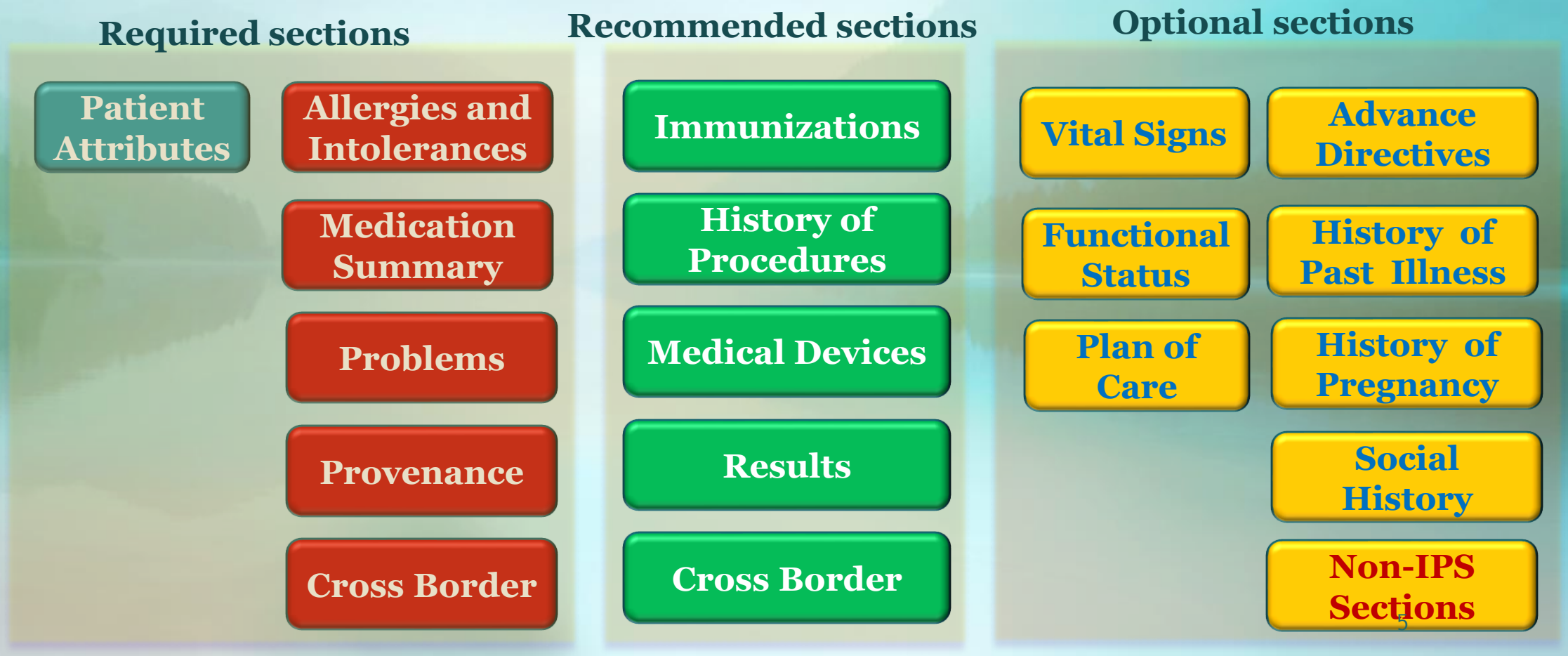
One of the principles underpinning European Union policies relates to the **free movement of its citizens**(patients and clinicians) throughout its Member states. **Patients demand the same standard of care when and wherever required.** Healthcare providers and their responsibilities are subject to change, and this too requires **data to be shared in a seamless way**.

The **difference and diversity in existing implementations** in the increasingly complex healthcare ecosystem **makes it currently difficult to exchange clinical data at the level of semantic interoperability**. As a minimum there is a strong requirement to provide **simple interoperable solutions** for key applications.

The **objective** of the EU is to **support continuity and coordination** of healthcare of EU citizens **across EU Member States**.

1. A short description of the IPS

The **IPS** draft standard outlined in the **FprEN 17269** standard provides a **baseline information model of a Patient Summary**. It represents the core, minimal and non- exhaustive data set from which custom **IPS** models must be derived.



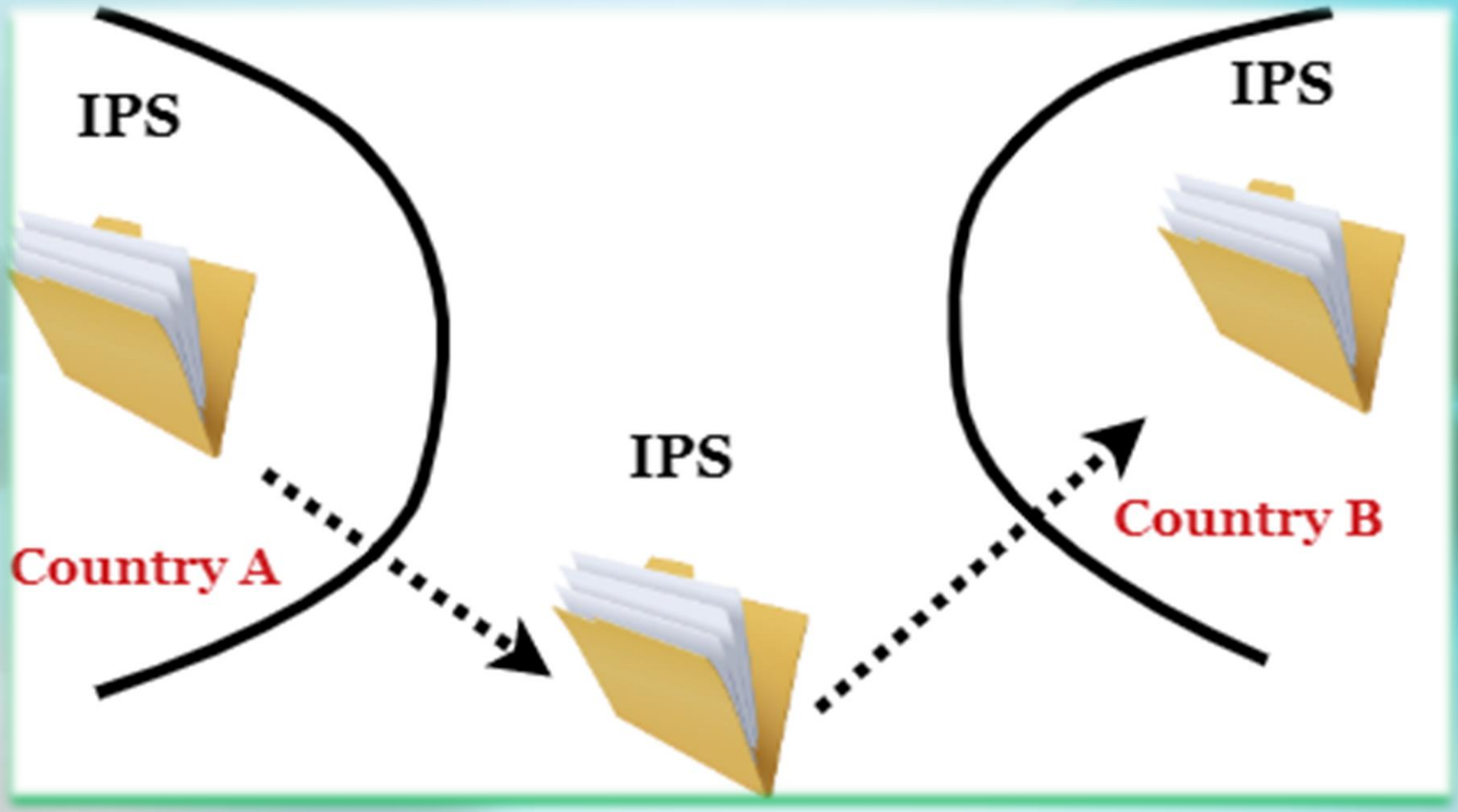
2. Use cases

The original use case covers the scope of a single, primary scenario to **exchange** a Patient Summary **cross-border for unscheduled care** of a visitor. This requirement has been the focus throughout the joint development of **`FprEN 17269`** and **`FprCEN/TS 17288`**.

However, the needs of EU Member States went beyond the original scope and it was agreed that the IPS can be employed in **secondary scenarios** providing this did not compromise the original requirement.

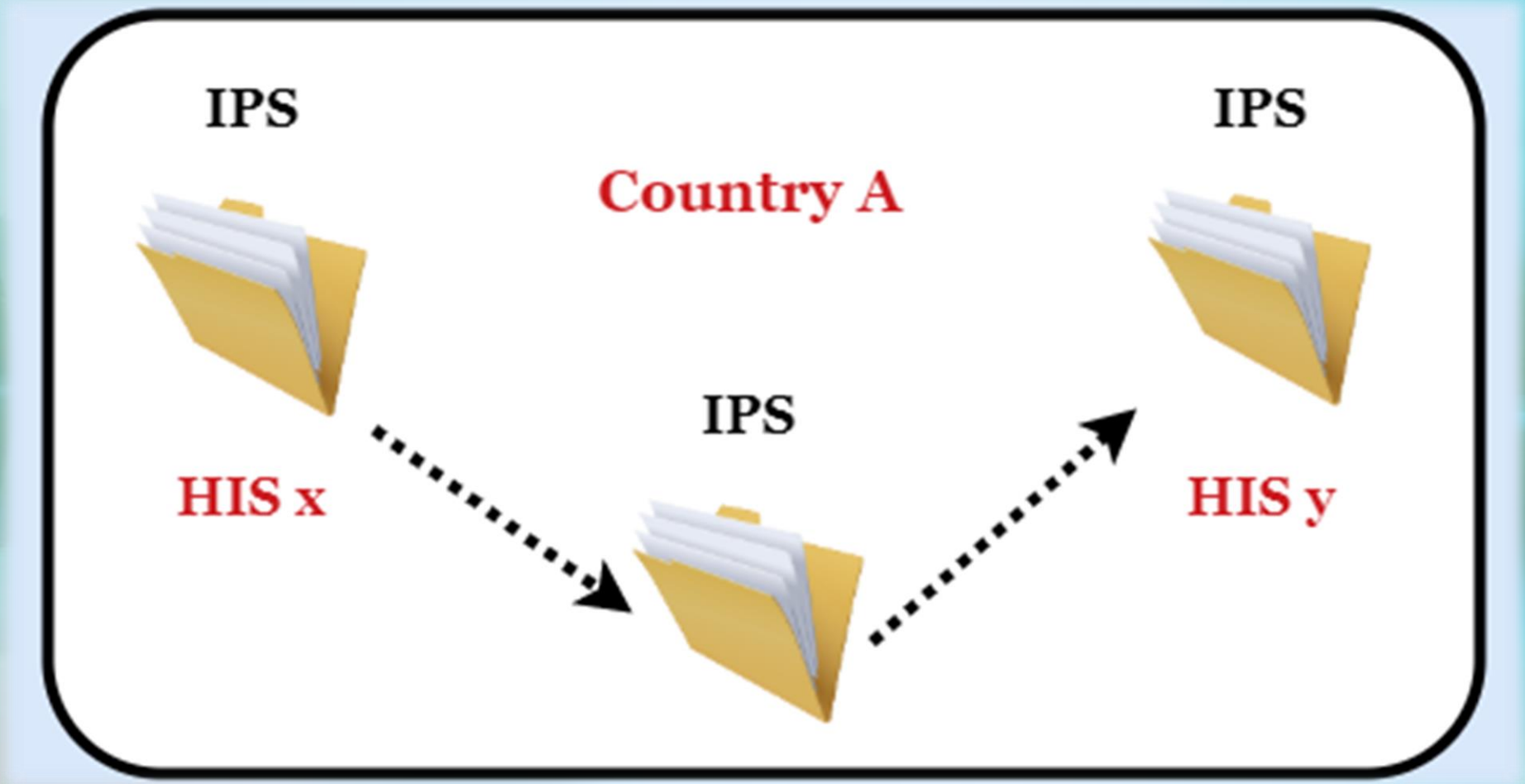
2.1 Scenario No. 1

Primary Scenario: Cross-border exchange, unscheduled care



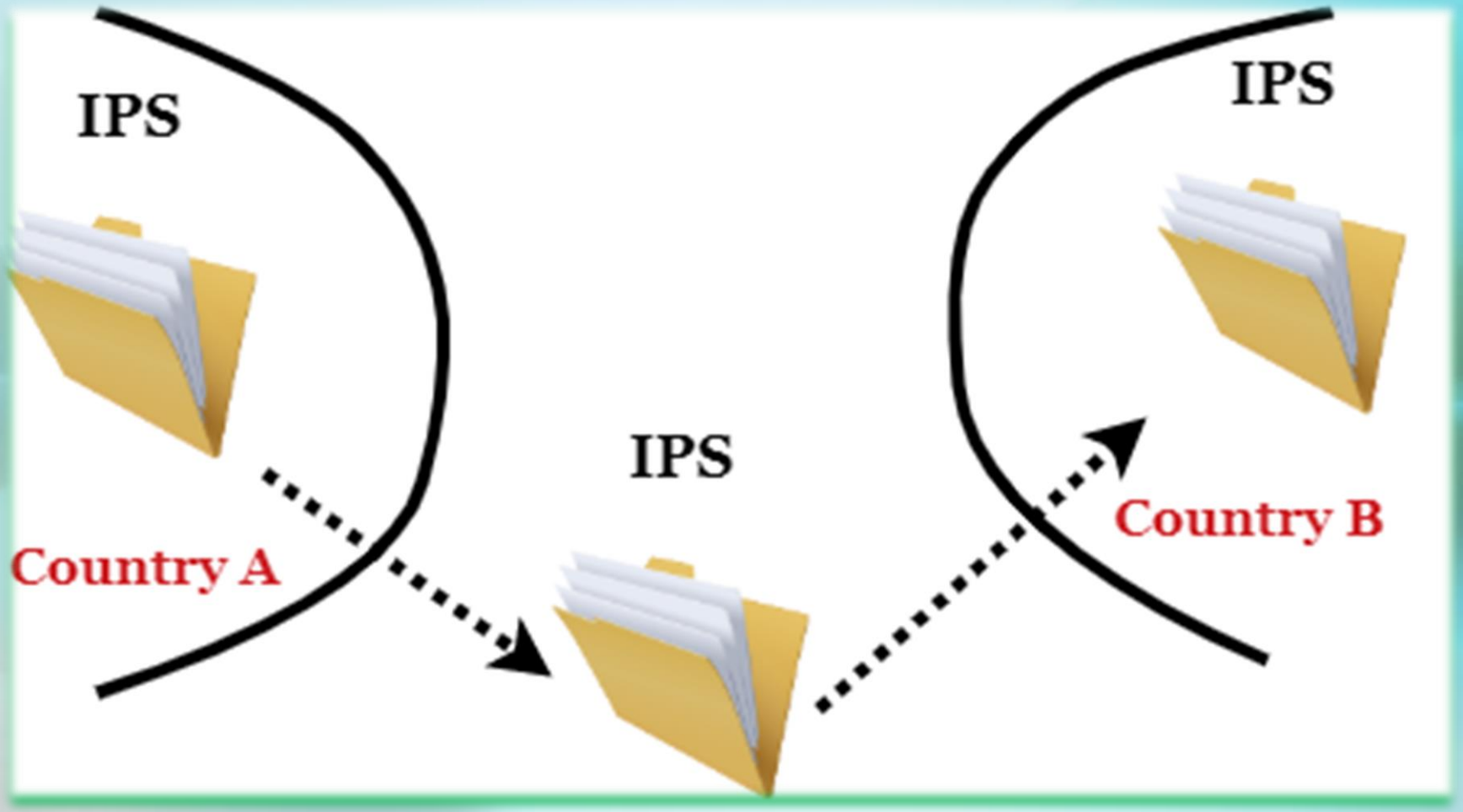
2.1 Scenario No. 2

Secondary Scenario: Local, Unscheduled care



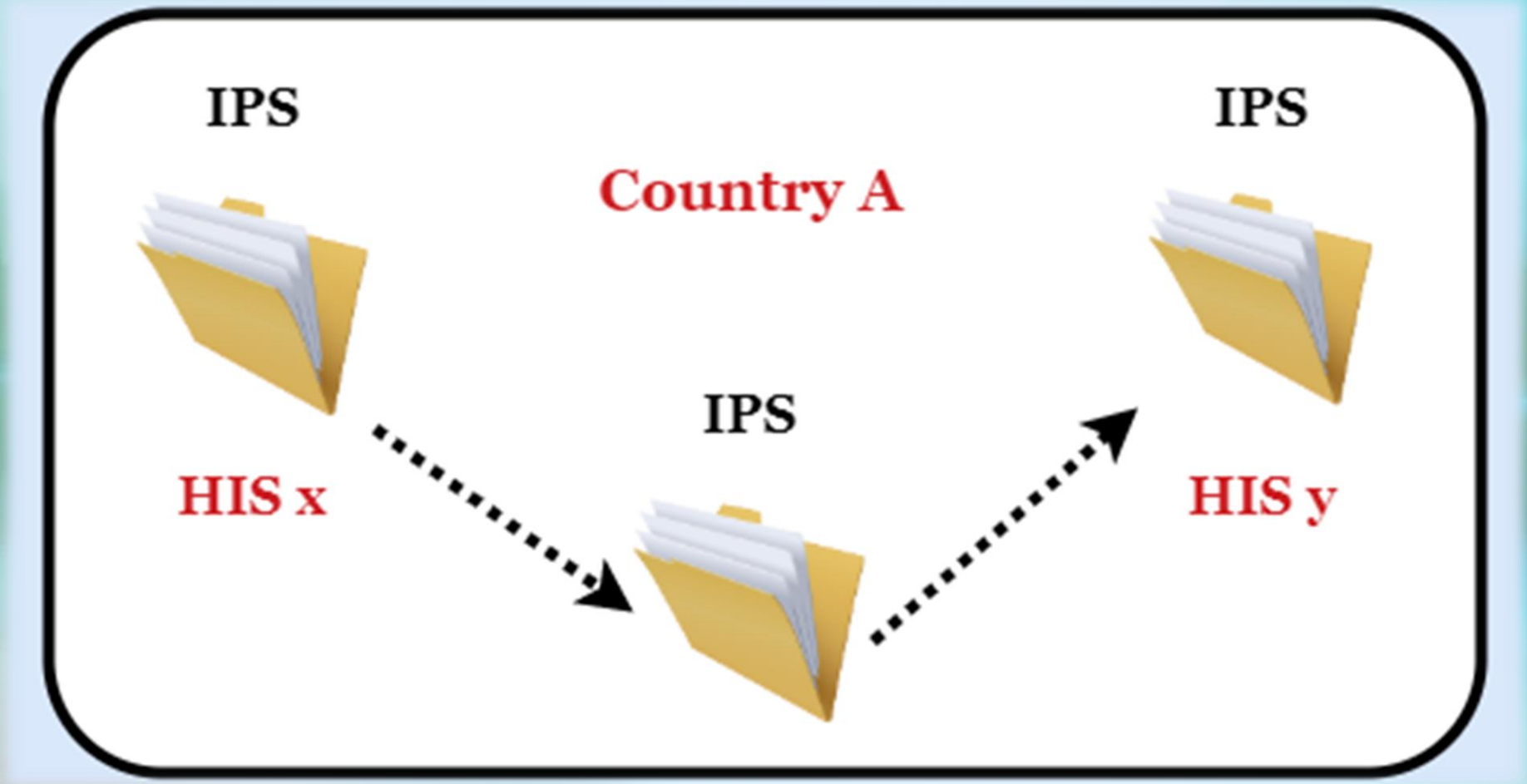
2.3 Scenario No. 3

Primary Scenario: Cross-border exchange, scheduled care



2.4 Scenario No. 4

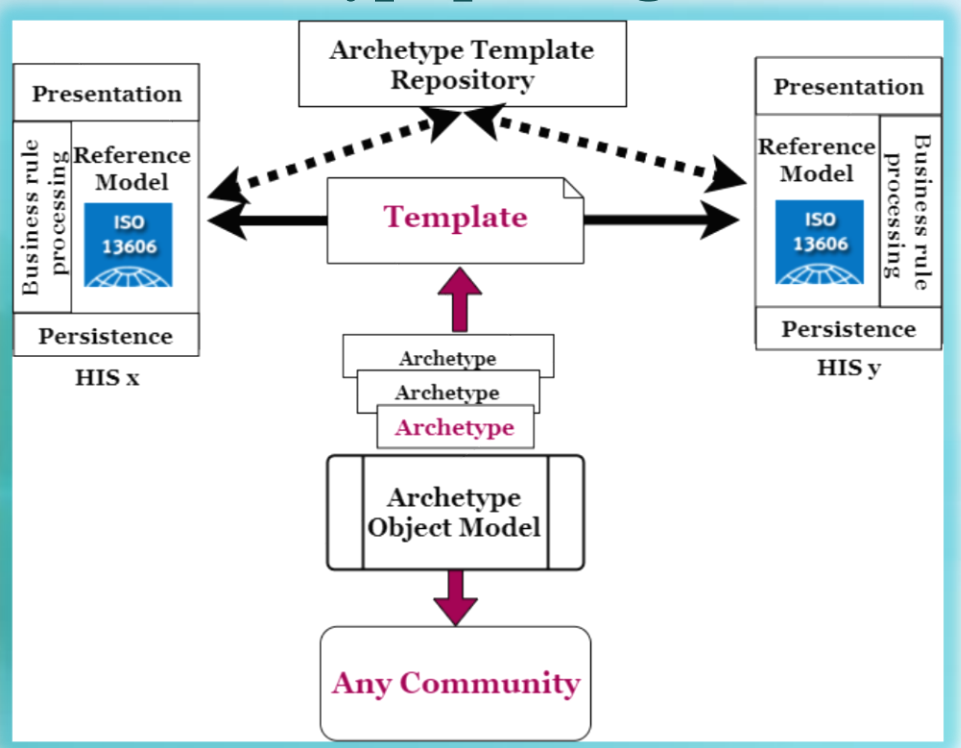
Secondary Scenario: Local, Scheduled care



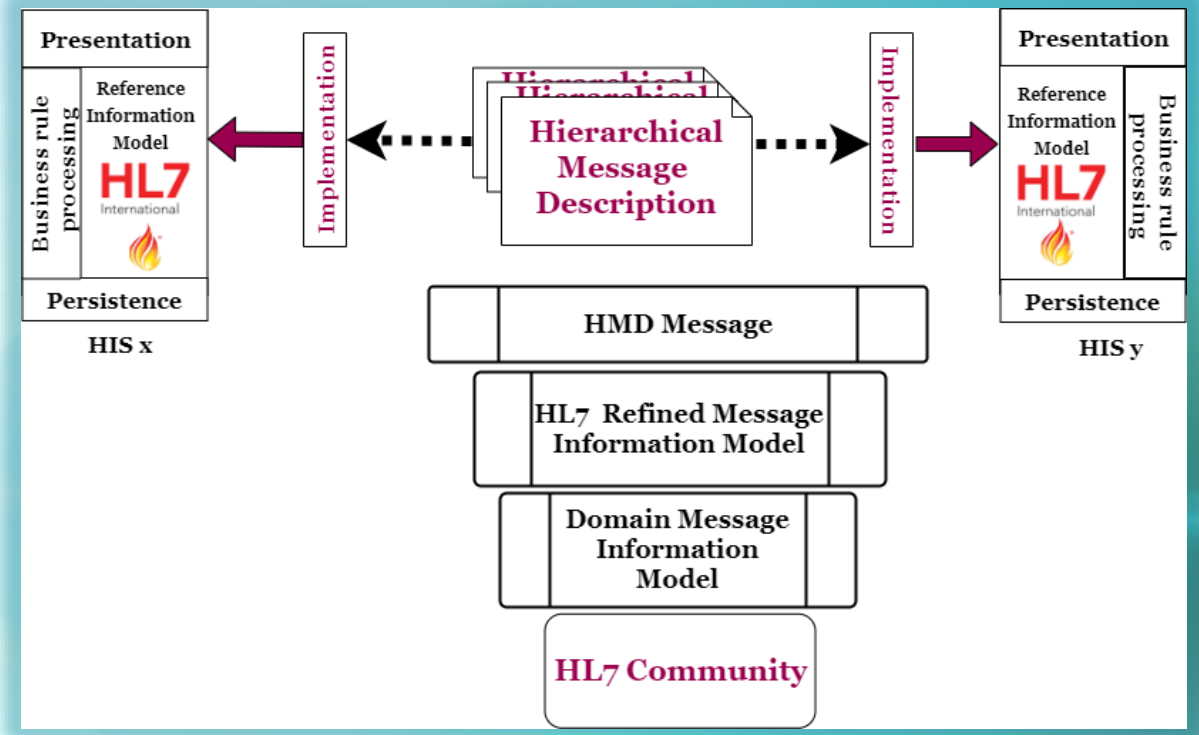
3. Implementation challenges

Implementation Approaches

Archetype paradigm



Message paradigm



G. Freriks, G. de Moor and D. Kalra, "White paper: Archetype paradigm: an ICT revolution is needed," 13 March 2007. [Online]. Available: http://www.eurorec.org/files/filesPublic/ArchetypeParadigmFeb2007.pdf. [Accessed 5 June 2019]

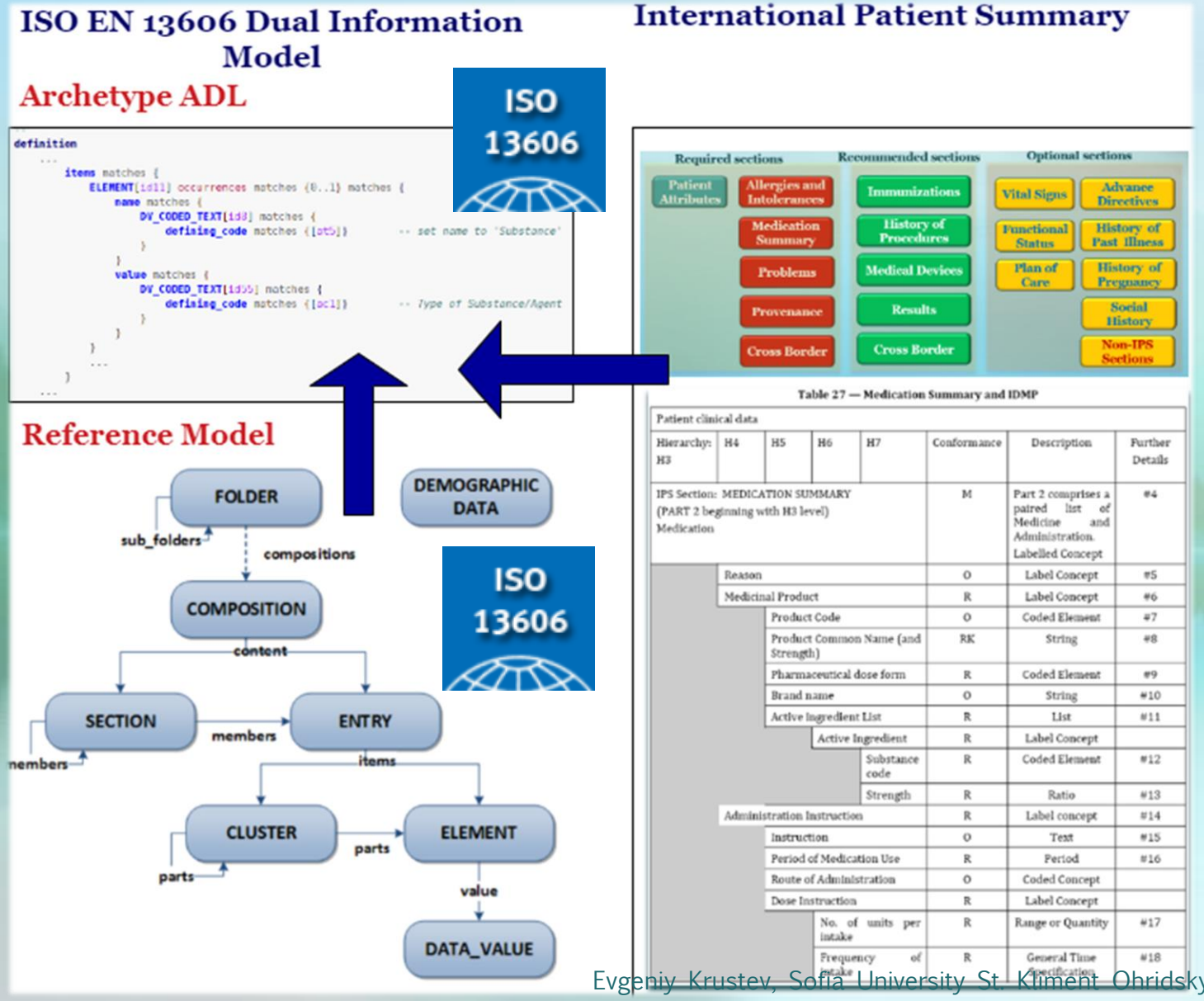
3.1 Archetypes

The **ISO EN13606 Reference Model** represents the global characteristics of health record components, how they are aggregated, and the context information required to meet ethical, legal and provenance requirements.

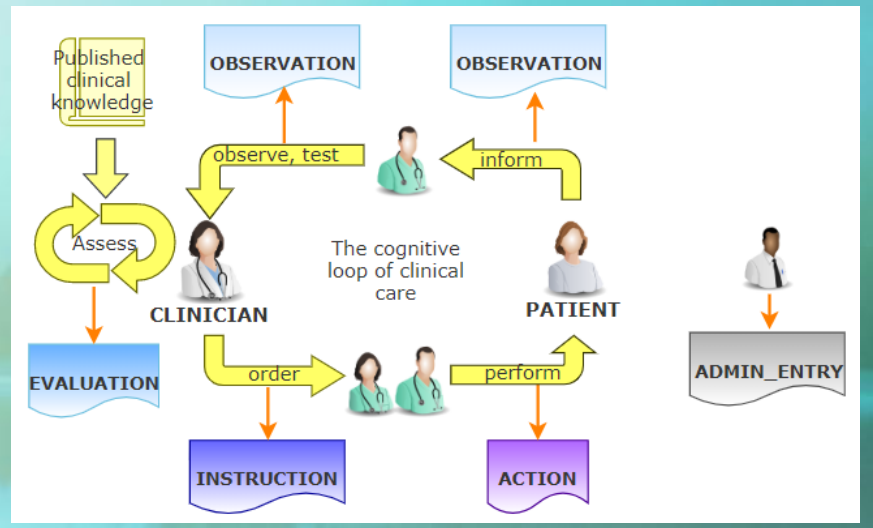
Archetypes are effectively pre-coordinated combinations of named hierarchies that are agreed within a community in order to **ensure semantic interoperability, data consistency and data quality**. **ISO EN13606** provides an **Archetype Object Model** and an **Archetype Description Language** used in the Reference Model.

The **use of standard based archetypes** provides an **interoperable way of representing and sharing clinical data**, in **support** of consistent (good quality) health care record-keeping and the **semantic interoperability** of shared **Electronic Health Records**.

3.2 IPS design with Archetypes



Identify ENTRY types in IPS SECTIONs and represent them as Archetypes in ISO EN 13606



Flow of events in the therapy business process

3.3 Challenges

1. There is just a small group of professionals in Medical Informatics and Computer Science that are well familiar with the EU standards in Health Informatics and the technologies for their implementation (governmental, academic and private sector level).
2. There is almost no governmental support for the implementation of these standards.
3. The documents that describe the EU standards in Health Informatics and the set of codes from terminology servers are not freely available and, in most cases, it is difficult to acquire these documents and codes.
4. There is quite a limited set of software tools in support for the implementation of the basic requirements set by these standards.
5. There are no reference model implementations of the EU standards for semantic interoperability and IPS in particular that are freely available to the community.
6. The standards are written without taking in consideration the problems in their implementation in practicable applications in healthcare.

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Professor Evgeniy Krastev, PhD
Faculty of Mathematics and Informatics
Sofia University St. Kliment Ohridsky
Sofia, Bulgaria
eck@fmi.uni-sofia.bg
https://ehealth.fmi.uni-sofia.bg

Thank you for your attention!

Questions?

Comments?