

Model of Good Practice tools for risk reduction and clinical governance

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Luxembourg, 7 April 2005

[Introduction]

- Main challenges in healthcare
 - Risk reduction
 - Improvement of the quality of care
- Contribution of ICT
 - Support healthcare professionals in
 - Reducing medical errors
 - Making the most relevant decisions
 - Finding the most appropriate procedure for each patient
 - Tools available
 - Knowledge Management
 - Decision Support Systems

Comparison of 2 tools developed in recent R&D projects*

- Collaborative practices: IST PALLIANET Project
 - Decision support and knowledge driven collaborative practices in Palliative Care networks
- Co-ordinated care: IST CARE-PATHS Project
 - Implementation of Clinical Pathways that contribute to the continuous improvement of the quality of care

***Projects partially funded by the European Commission under the IST initiative**

Pallianet



- Aims at improving communications and real time access to information amongst palliative care networks
- Pallianet tools
 - “Knowledge Generation” and Ontology Management modules
 - Extraction of knowledge and identification of Best Practices
 - Description of the care delivery context with a Context designer
 - “Community & Knowledge Management Service”
 - *Communication tools*
 - “Case discussions” to get support from the co-ordination team
 - Access to *specific databases* of relevant documents and “Best Practices Guides”
 - “Best Practice Agents” that scan patient’s record and “Best Practice Guides” to help making the best decision
 - Tools for
 - Maintaining the quality and relevance of knowledge
 - Making explicit and revising Best Practices

Care-Paths



- Leans upon **clinical pathways**
 - Plans of care applied to patients with a *known diagnosis* and a *predictable clinical outcome*
- Care-Paths tools
 - Semantic based knowledge system enabling the authoring of clinical pathways
 - Clinical pathways definition
 - Access to internal and external document repositories
 - Decision Support Tools for care givers
 - To put in practice clinical pathways
 - Access to patient records databases and to clinical documents
 - Monitoring and analytical tools for clinical pathways' variance
 - Historical data gathering
 - Evaluation of a patient's variance
 - Proposition of changes in the patient's pathway, or pathway redefinition



[Generic model of « Good Practices » tools]

- Definition of a generic model
 - For transforming shared and documented Good Practices into software entities
 - Supports
 - Interaction with existing Healthcare Patient Records
 - Ability to enforce rules and/or to propose advice
 - Ability to evaluate historical practices and performance to propose practice revisions
 - Based on a generic scenario to support
 - Definition
 - Enactment
 - Revision
- of « Good Practices »

Generic scenario

1) Set up

- Definition of Good Practices
- Creation of a gateway to existing Information systems
- Modelisation of Active Practice Templates

2) Enactment

The Active Practice Service continually:

- Monitors the case
- Reminds the practitioner of key case info
- Proposes options for processing the case
- Alerts the practitioner in case of deviation
- Proposes elements for making decisions

3) Practices revision

- Computation of deviations indicators
- Analysis of deviations at the level of Active Practice Template
- Proposals for Template revision
- Revision of Good Practices

Presentation of the « Active Practice » Service architecture



**Existing Care
processes**



Definition of Good Practices



**Existing Care
processes**

Analysis



***Good Practice
definition***

Definition of Good Practices



**Existing Care
processes**

Analysis



***Good Practice
definition***

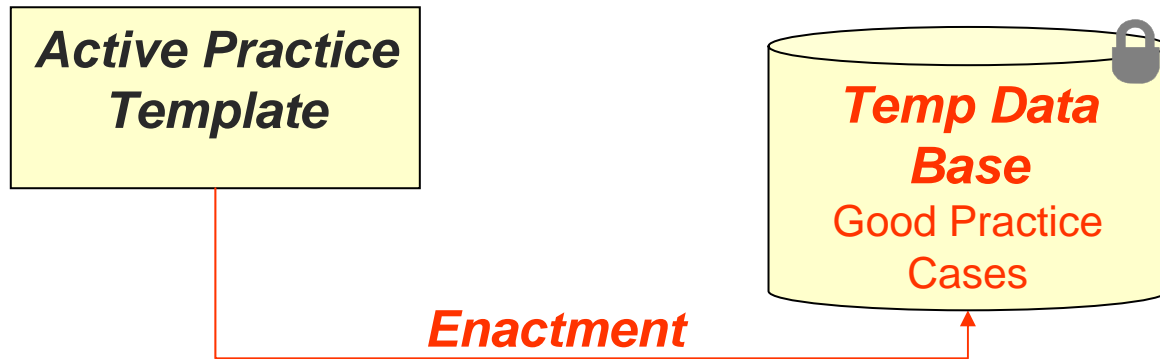
Modeling



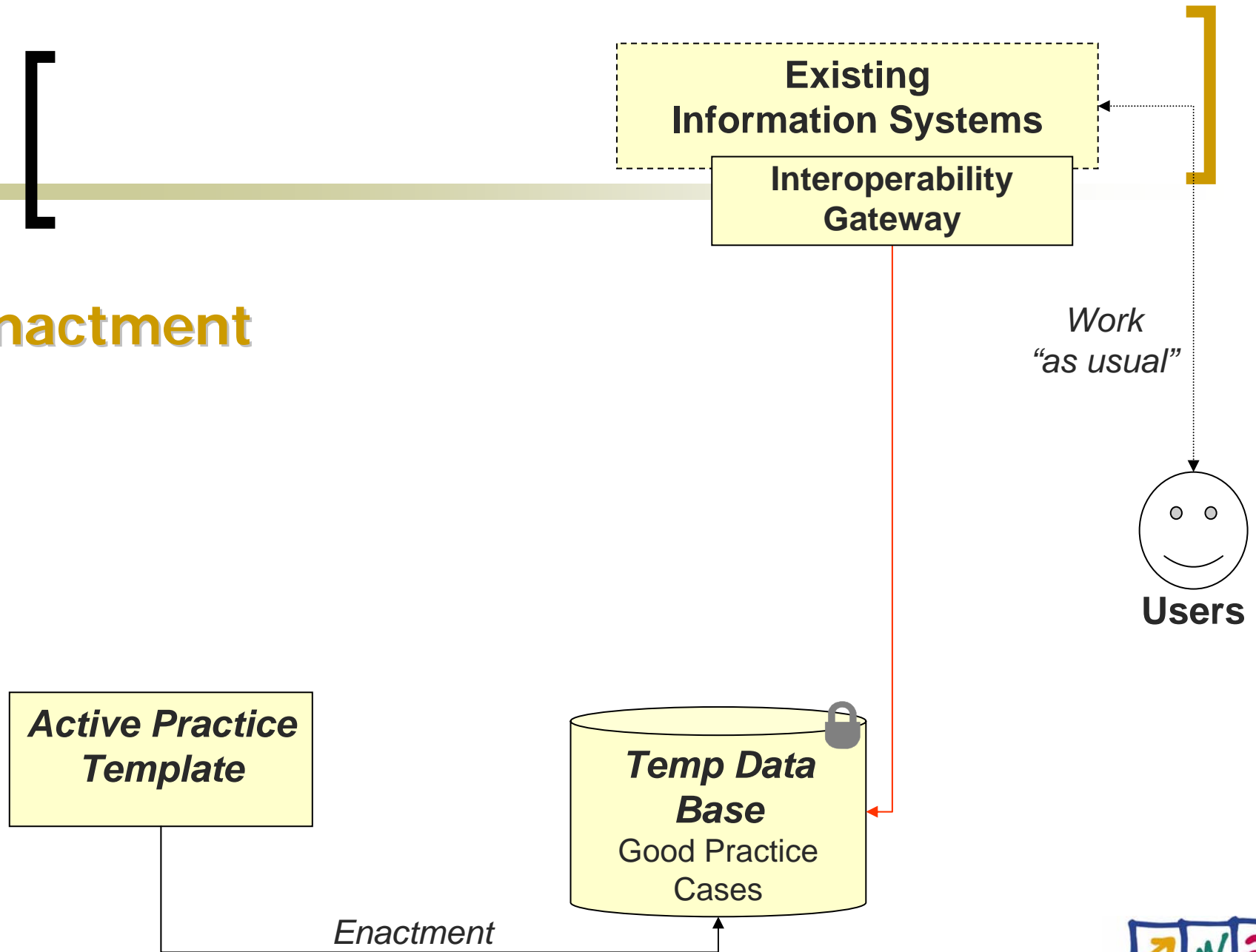
***Active Practice
Template***

Definition of Good Practices

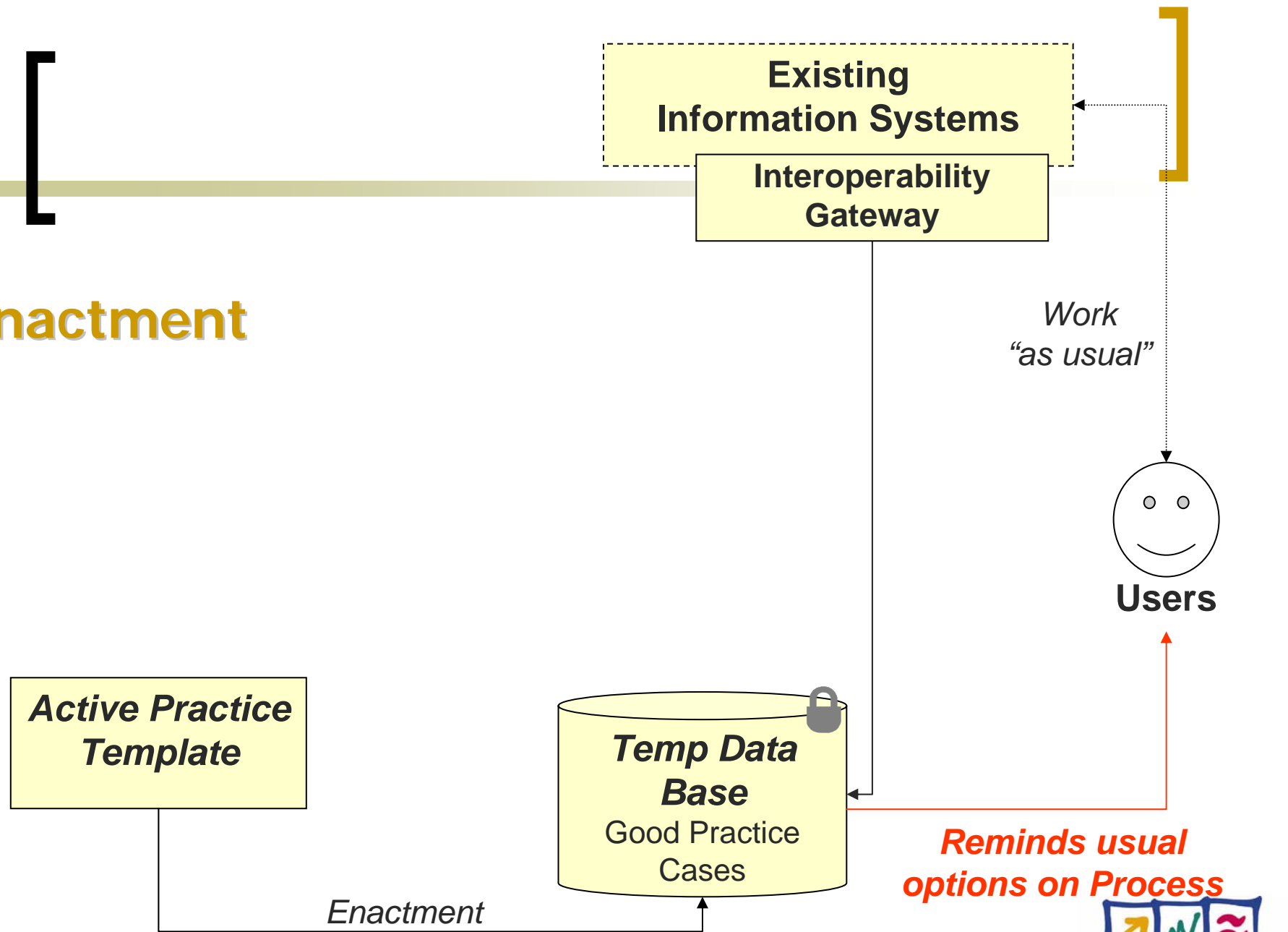
Enactment



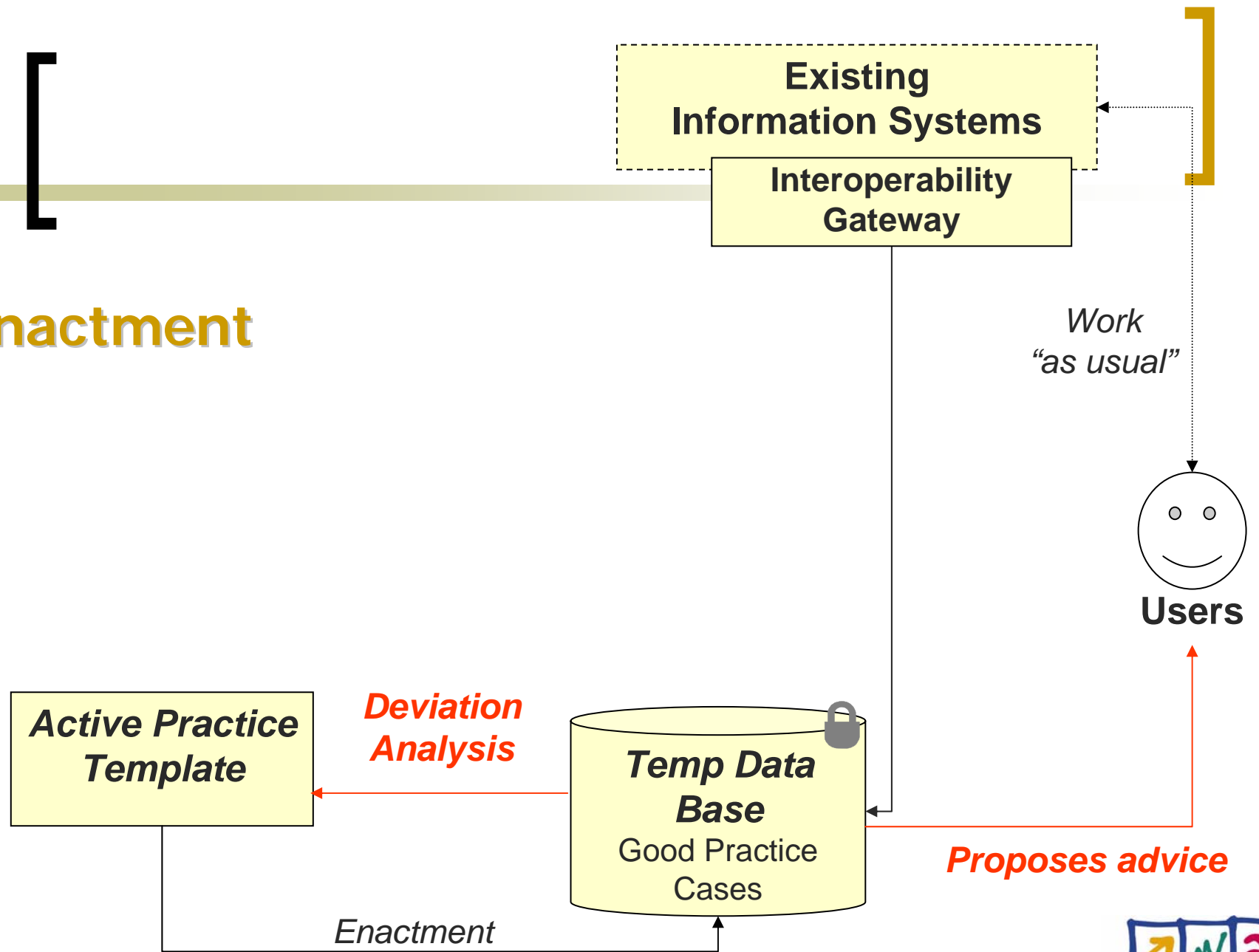
Enactment



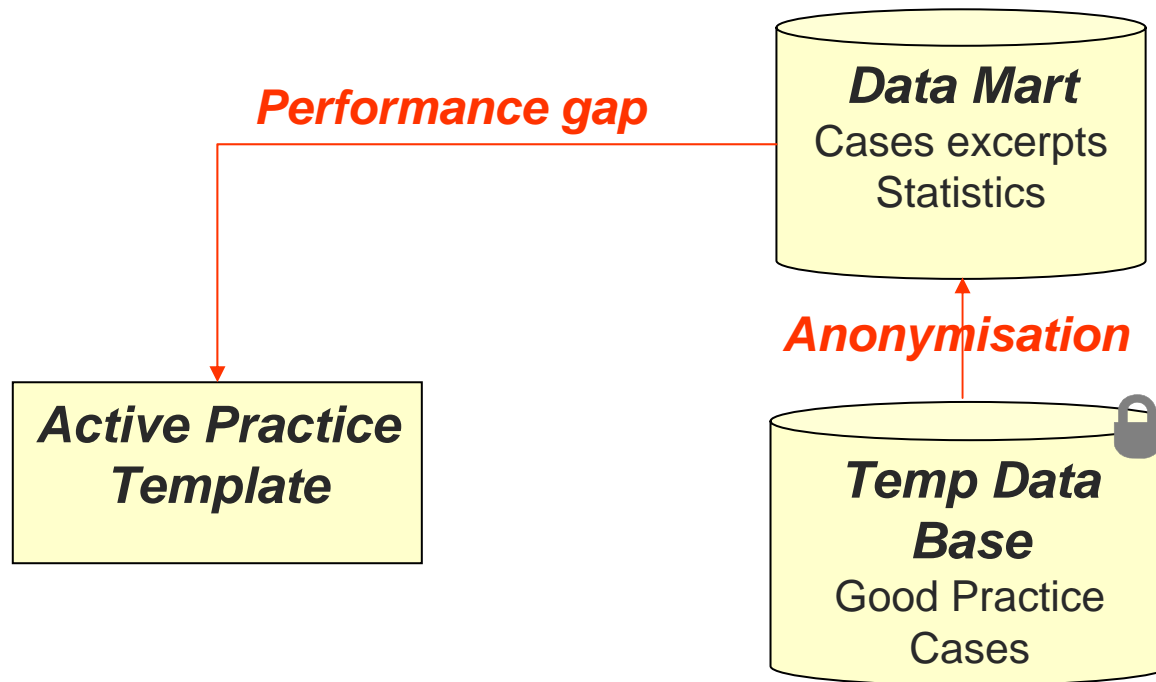
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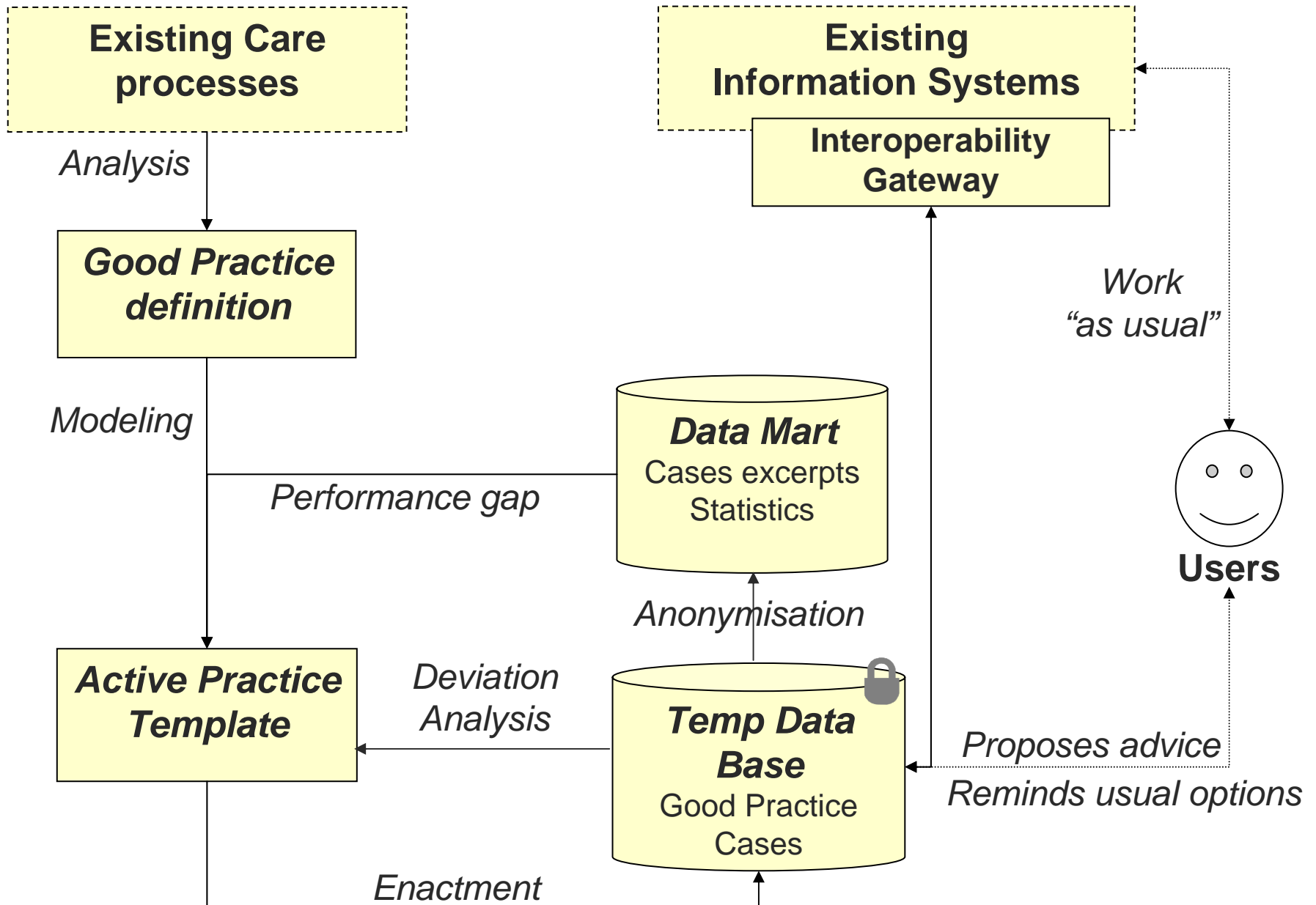


Enactment



Practices revision





Conclusion

- Leverages on the knowledge available about « Good Practices »
- Reflects the willingness to enact Good Practices to
 - Reduce risks related to care processes
 - Support healthcare professionals in making the most relevant decisions