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Process Life Cycle Support for Ensuring Compliance with Semantic Constraints

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Sea**Flovs**

Semantic Constraints in Adaptive Process-Management-Systems

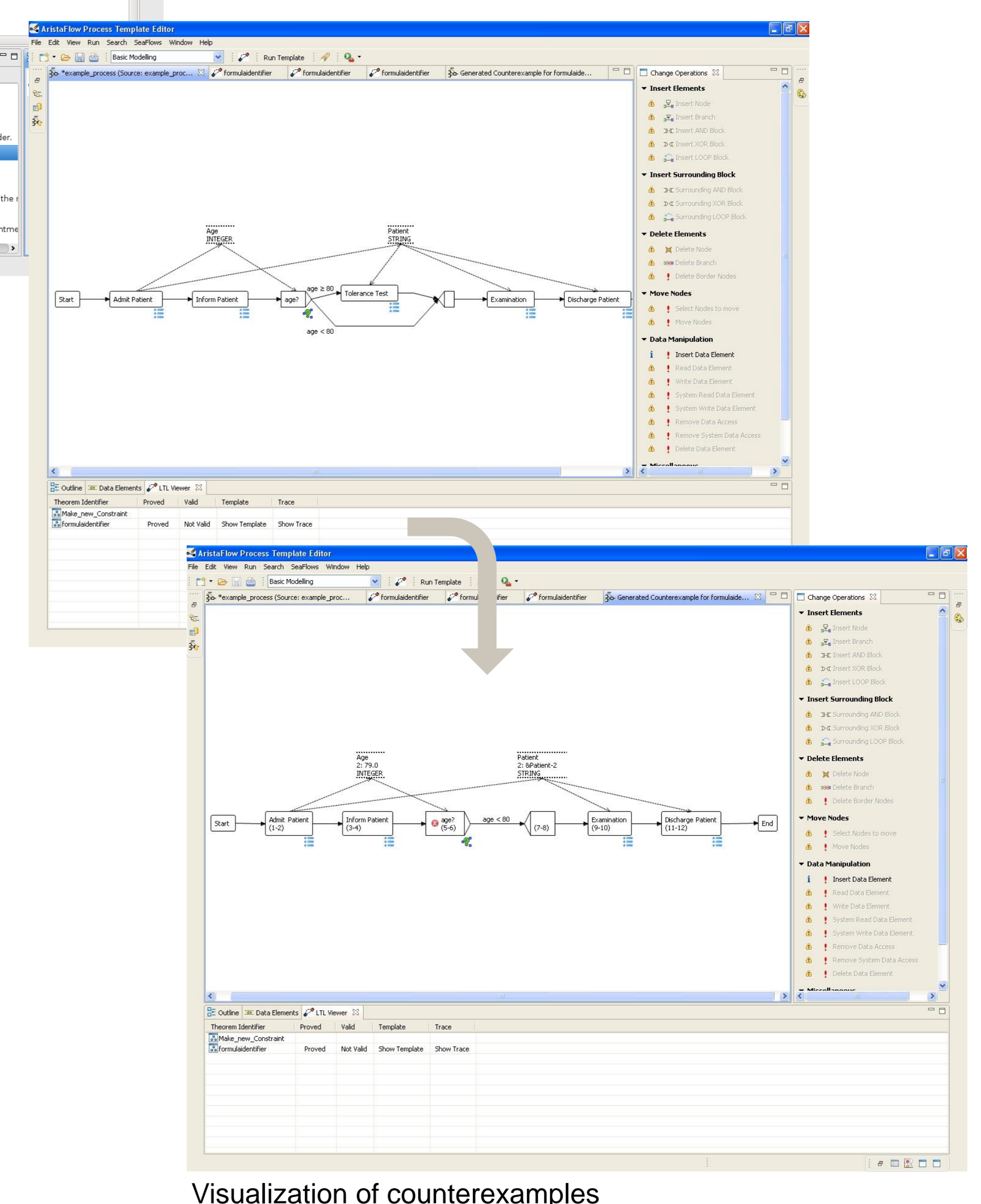Linh Thao Ly, David Knuplesch, Stefanie Rinderle-Ma, Peter Dadam - Institute of Databases and Information Systems

Constraint modeling

- Use a visual logic-based specification language to model semantic constraints intuitively
- Model constraints at a high abstraction level by using ontologies

Detailed validation reports

Visual constraint modeling
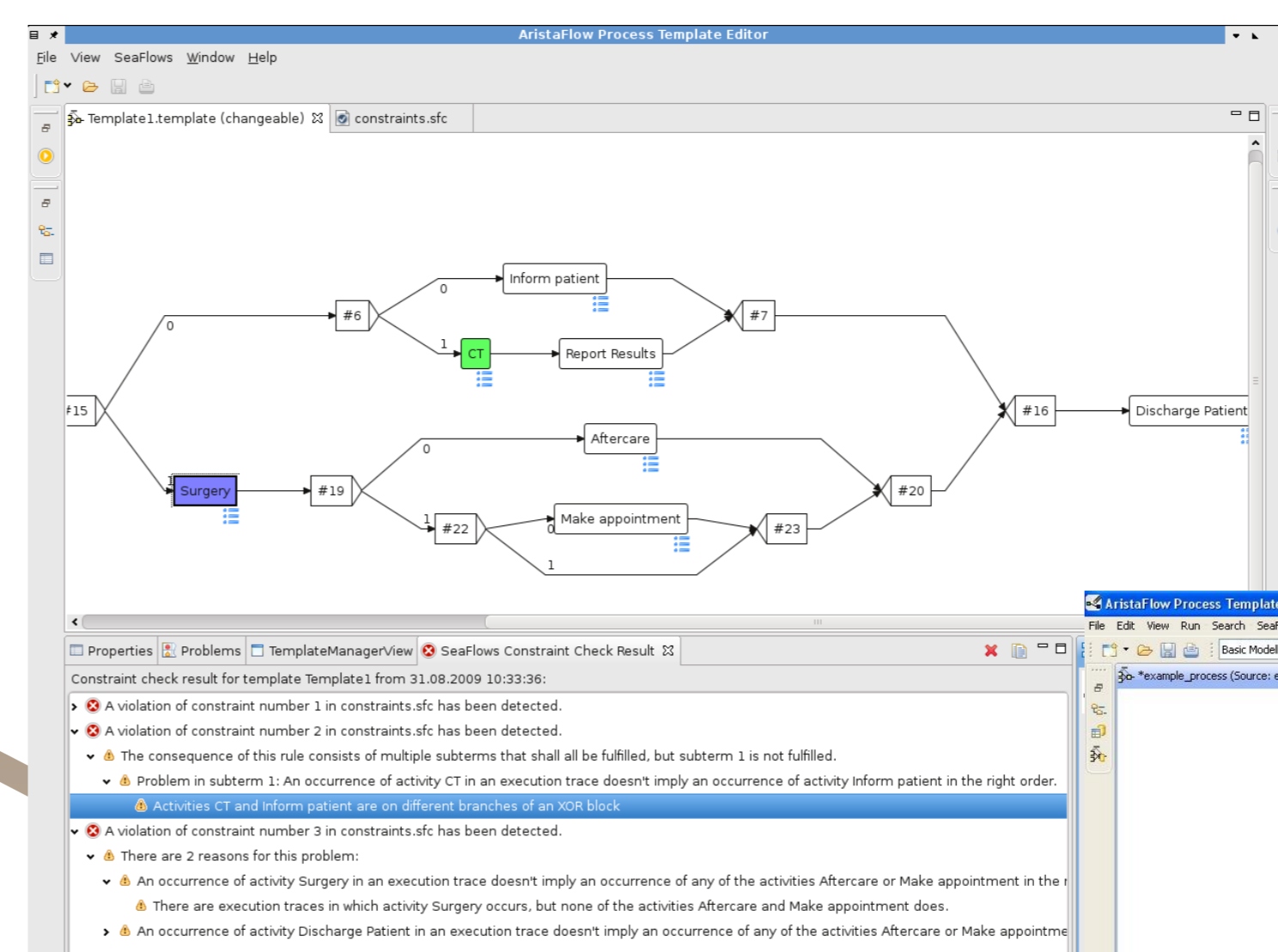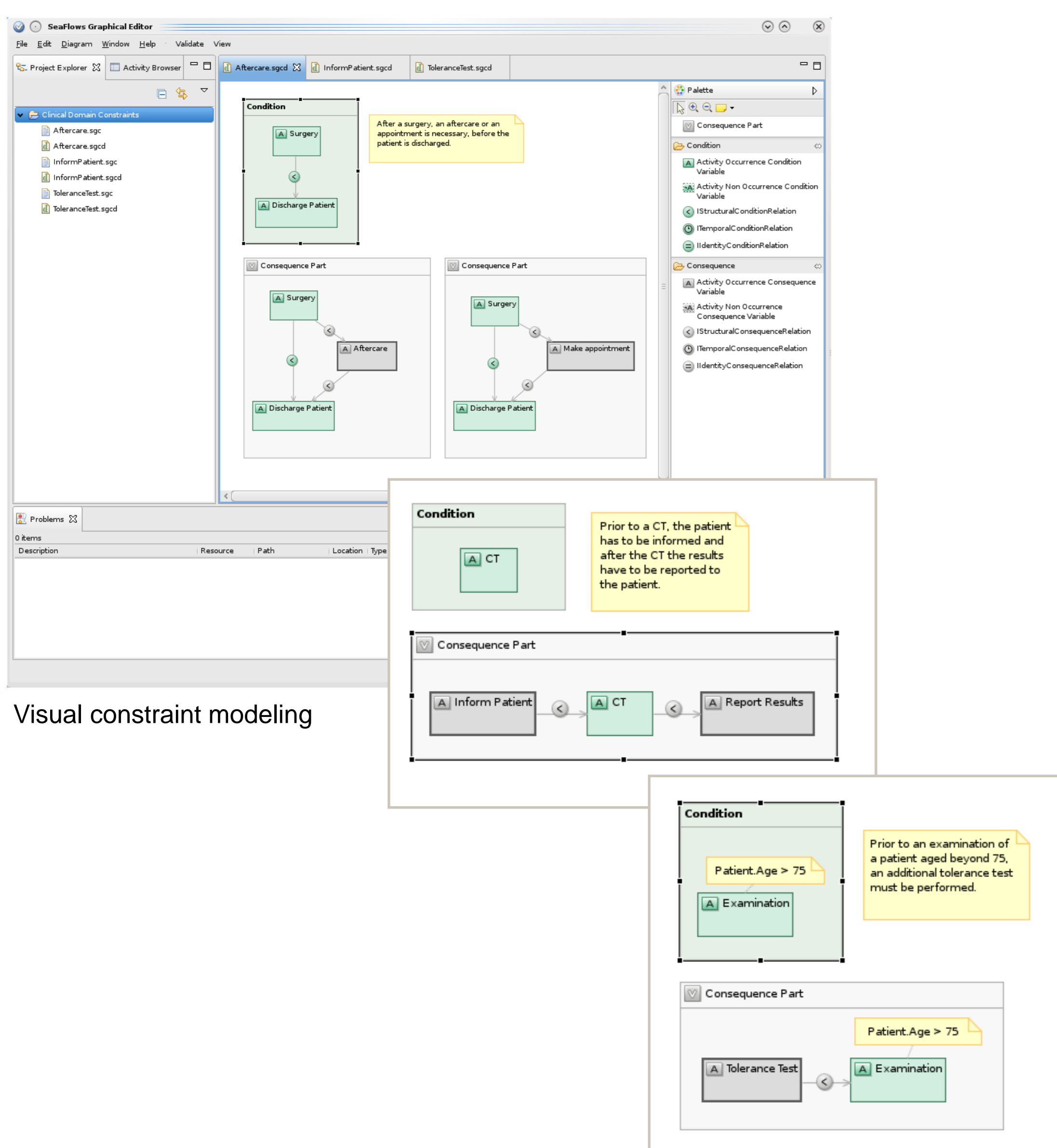
Process design

- Enrich process models with imposed constraints and instantiate them
- Ensure compliance by verifying process models against imposed constraints
- Benefit from helpful validation reports and visualization of constraint violations

Visualization of counterexamples

Process execution

- Monitor the compliance with imposed constraints for running process instances
- Ensure that ad-hoc process adaptations at runtime do not introduce incompliance
- Override violated constraints if necessary

Process evaluation

- Document and trace constraint violations
- Gain input for process optimization

Contact

Linh Thao Ly

Institute of Databases and Information Systems

thao.ly@uni-ulm.de
www.uni-ulm.de/in/iui-dbis/forschung/projekte/seaflows.html

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