Semantic Interoperability Adheres to Proper Models and Code Systems
A Detailed Examination of Different Approaches for Score Systems

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Summary
Objectives
Achieving semantic interoperability requires not only the use of communication standards like HL7 with its underlying models and specifications, but also to constrain those models to instances including permitted attributes, data types, values and code systems. Even the application of both strategies may lead to different modeling approaches and therefore incompatible results, however.

Methods
This paper analyzes the different ways to create a model exemplified at score and assessment systems.

Results
The different approaches have advantages and disadvantages. The presented results allow for transmitting the same basic information facilitating HL7 v2.x and V3 in a way reducing implementation efforts.

Conclusions
Establishing a generic approach to communicate the details of score systems driven by an appropriate set of codes is the best solution for implementers.

Keywords
HL7, Health telematics, semantic interoperability, communication standard, conformance, implementation guides, scores and assessments

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