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

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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.

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