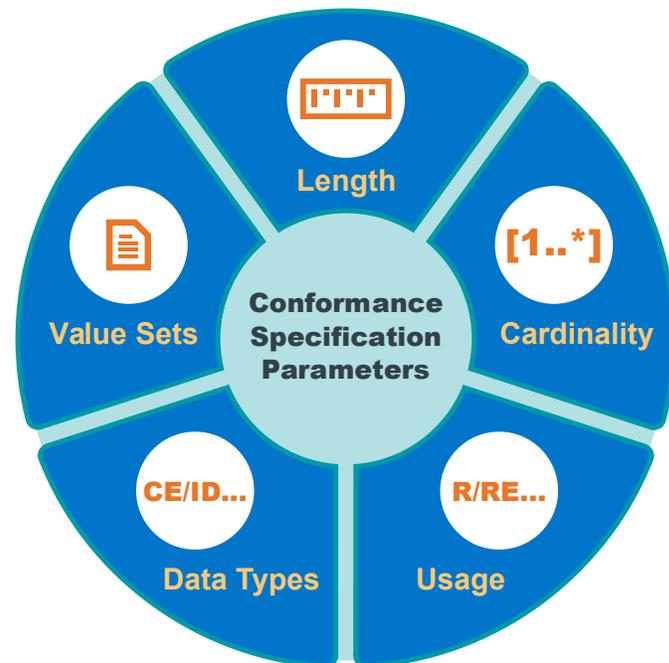


## HL7 Conformance Specification Parameters

Conformance specifications define what data are expected and how each type of HL7 message profile should be formatted. These specifications are defined in the Implementation Guide using five major parameters: length, cardinality, usage, data types, and value sets.

Cardinality and usage specifications apply to segments, fields, components and subcomponents; data types, value sets, and length parameters apply only to fields, components, and subcomponents.



### Length

Length refers to the maximum size of a data field and is indicated by the number of characters (e.g., 20).

### Cardinality

Cardinality refers to the minimum and maximum number of times a data element may appear in a given message and is indicated by two numbers inside a pair of brackets (e.g., [0,1]). The first number indicates if the element must be present (0 = not required, 1 = required). The second number represents the maximum number of occurrences. An asterisk (\*) in second position means there is no maximum.

### Usage

Usage refers to the circumstances under which a data element appears in a message, such as required, optional, or conditional. Usage is indicated by abbreviations such as “R” for required, “RE” for required but may be empty, or “X” for not supported.

### Data Types

Data types refer to specifications for certain field-level data, such as numeric or time stamp. The data type is indicated by an abbreviation such as XAD for “extended address” or ST for “string.”

### Value Sets

Value sets refer to tables that list acceptable values to be used in field-level data. These tables can be published by HL7 or defined elsewhere. A value set is indicated by notation such as: “HL7-Defined Table 0227” for Manufacturers of Vaccine (MVX) and “NIP-Defined Table 0001” for Immunization Information Source.



### Want to learn more?

This quick reference guide was adapted from “HL7 Advanced for IIS.” Find it and other useful training and resources for IIS at [www.phii.org/iishub](http://www.phii.org/iishub).