

Issue 32: Instrument Implementation: Clarification of Definitions

Currently in GSIM:

Instrument

Definition: A tool conceived to record the information that will be obtained from the Observation Units (p. 151).

Explanatory Text: The Instrument describes the tool used to collect data. It could be a traditional survey, a set of requirements for a software collection program, a clinical procedure, etc.

Instrument Implementation

Definition: A concrete and usable tool for gathering information based on the rendering of the description made by an Instrument (p. 153).

Explanatory Text: This represents an implementation of an Instrument. It describes the way in which an Instrument has been translated from a design to a concrete tool. It could represent a printed form, a software program made following a specific technological paradigm (web service, web scraping robot, etc), the software used by a specialised device to collect data, etc. When it describes a Survey Instrument, it can contain descriptions of how each construct (e.g. Questions, Value Domains, validation Rules contained in the Instrument) is implemented.

Issue:

At first glance, the definitions of Instrument and Instrument Implementation are confusing because they both refer to tools - one for **recording** information and another for **gathering** information. It is difficult to understand the difference between the two objects as the examples in the Explanatory text are similar.

Suggested Solution:

An alternate definition and explanatory text for Instrument:

Instrument

Definition: A **means** conceived to **gather** the information that will be obtained from the observation units.

Explanatory Text: The Instrument describes the means used to collect data. It could be a traditional survey, a set of requirements **to be met by** a software collection program, **or** a clinical procedure, etc.

The specification of an Instrument is "implementation independent". In other words, it does not depend on the way(s) in which the Instrument will be rendered (eg on paper or via software) to become a usable tool for gathering information.

Recommendation:

The definition of Instrument and Instrument Implementation could be amended (see suggested solution) to include the fact that an Instrument is format and platform independent, whereas Instrument Implementation is when an Instrument is put into a particular format.