

# LOINC

Regenstrief Institute's Logical Observation Identifiers, Names and Codes (LOINC®) was selected to standardize the thirty data elements across the participating sites. Started in 1995, LOINC® has been adopted by the Office of National Coordinator for Healthcare IT as a viable standard for information exchange. According the preface of the LOINC User's Guide (Appendix # 1), "LOINC facilitates the exchange and pooling of results, such as blood hemoglobin, serum potassium, or vital signs, for clinical care, outcomes measurement, and research." LOINC is not intended to convey all possible information about a test or observation; only to identify the assay or procedure whose data is being sent.

LOINC® operates on the use of six attributes to perform such identification:

1. Component (analyte) – the assay, such as glucose, hematocrit
2. Property – type of measurement, such as mass concentration, molar concentration
3. Timing – length of time of collection, such as venipuncture being a point in time, or a 24 hour urine collection
4. System – what is the specimen or source of observation, such as blood, serum, ventilator setting
5. Scale – is the result type quantitative, qualitative or nominal
6. Method – where relevant, this is the method used to create the value or response

The current version of LOINC holds over 34,000 laboratory terms, and is enriched by collaboration of hospitals and laboratories internationally. The numeric value of the LOINC code holds no information per se about itself. Ranges of LOINC codes are not allocated for classifications such as serologies or coagulation, as CPT codes are. The next submission for lab or clinical LOINC gets the next sequential code when approved, no matter what the content. There are markers in the LOINC Access database to identify classification (Chemistry, Serology, Microbiology, etc) or designation of order or result.