

Request for Tables of Laboratory Reporting Units Linked to LOINC Codes

(sent to LOINC interest list serve on Dec 19th, 2007)

The LOINC committee is interested in the degree to which laboratories agree in their choice of reporting units for individual tests.

We realize that laboratories may use different text strings to represent the “same” units. For example, mg/dl and mg% mean the same thing as do mg/L and mcg/ml. We are only minimally interested in these differences. Our real interest is in genuinely different units of measure e.g. where one laboratory reports a result as mg/dl and another reports the same result as mg/L,

So if you have mapped your individual result codes to LOINC codes we ask if you could provide us with a file that contains your results code, its display name, its reporting units and the LOINC code to which you have mapped it. (Four columns) We could take this as a spreadsheet, a comma delimited file, or an access table. If you happen to use different reporting units for different test codes that map to the same LOINC code please include them all in the table you send.

We do not plan to make the tables you submit public nor provide them to anyone outside of the group that will do the analysis. However we do plan to summarize the information in a report that would show the substantially different units reported by different labs under the same LOINC code and make that available. We would not include your display name, your reporting code or specific reporting units in this report without specific permission, and will not provide that information to any outside party. We would like to be able to acknowledge your contribution to this effort and possibly to associate your lab with the particular LOINC codes that we include. If you would prefer that we not identify your laboratory – tell us and we will use a bogus name – eg Lab A, Lab B, to distinguish among the contributing laboratories who want to remain anonymous.

The goal of all of this is three fold, First we want to know just how divergent reporting units are among laboratories. Where our sample of laboratories do agree the units of measure for a given LOINC code we will include that “agreed upon” units in the LOINC table, and use this information to speed the mapping of Local codes to LOINC codes. (If we get a large enough sample size, we might also be able to identify different “agreed upon” units for different parts of the world.

Where we find more than one units of measure for a given LOINC code we will investigate the reasons for the differences. Where the differences are large due to substantive difference in testing purpose, sensitivity, or numeric range of interest we may want to propose new LOINC codes to distinguish such results. In some cases the apparent differences will be due to miss-mapping- and we will report those cases back to the submitting laboratory and try to resolve them. Where the differences are due to history and taste, the possibilities for reducing these differences will become topics for discussion at the LOINC meetings. Where only two or three units of measure are prevalent for a given LOINC code we will also store these in the LOINC data base and use this information to facilitate the mapping (By excluding the LOINC codes whose associated units of measure do not match the units of the local code)

We are not trying to standardize the exact string being sent as units- that is the work of UCUM – but we will be able to accumulate the units strings that mean the same things for many purposes, e.g. Mcg/L = ug/L = ugms/L

We have already received such files from more than 10 laboratories including the two largest US laboratories and at least 7 files from other countries.
But we need much more to get reliable estimates

Please send your files with a covering email to Kathy Mercer at LOINC. Her email address is KMercer@Regenstrief.org

Thanks in anticipation

Clem McDonald MD