## DATABASE APPLICATIONS: PRL CASE STUDIES

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### **ABSTRACT**

This paper describes the process I used to develop a mapping from Cortex Medical Systems to Meditech and the way I developed a bundling program that converts text records into a format acceptable to Pathologist's Regional Laboratories. Each project involved using Apache2Triad, Mysql, and PHP. There were several issues regarding the datatype mismatches between Meditech and Cortex.

### THE BUNDLING PROJECT

Bundling is used to prevent overuse by physicians (see [1]). This first project was to find a way to import tab-deliminated files into a database and then run a program that does the bundling and meets the requirements of medicare ([3]). Once this runs, the user logs into <a href="http://localhost/phpmyadmin">http://localhost/phpmyadmin</a> and selects the prl database. There is a nice export feature that allows user to import the bundled data into excel. This program is used on a daily basis.

### THE HISTORICAL DATA CONVERSION PROJECT

This was a much more complex project. Cortex is a database with 22 tables, with the number of fields ranging from 5 to 57. Meditech has 6 tables with 10 to 18 fields. All the tables have the first field, TYPE, which contains the table name. All tables have the following 9 fields. In the first column is the Meditech field name, in the second is the corresponding Cortex data atom with reformatting notes. MRI – Cases.Patient, IDNAME – Patient.Name (reformatted as Last,First MI/SR/JR),SEX –Patient.Sex, BDT-Patient.Birthdate (in cortex in the format mm/dd/yyyy to be reformatted to yyyymmdd in meditech), SS-Patient. SocialSecurityNo usual format minus hyphens, PSID-Cases.AccessionNO in the format {C,H,S,NG}yy-dddddd, PSIDYR –yyyy –this is derived from yy in PSID. It is padded in the first two characters as 20 or 19 as required.PSDPX-one of {C,H,S,NG} in PSID, PSIDNUM –dddddd from PSID minus the leading 0s.The assignment was to find a mapping from Cortex to Meditech. The programs used to do the conversion used multiple triple joins.

# **REFERENCES:**

- [1] Bundling to reduce overuse, Statement of Glenn M. Hackbarth, Chairman, Medicare Payment Advisory Commission, Testimony Before the Subcommittee on Health of the House Committee on Ways and Means, May 10, 2007, <a href="http://waysandmeans.house.gov/hearings.asp?formmode=printfriendly&id=5893">http://waysandmeans.house.gov/hearings.asp?formmode=printfriendly&id=5893</a>
- [2] Apache2triad Documentation: <a href="http://apache2triad.net/">http://apache2triad.net/</a>-Download: <a href="http://sourceforge.net/projects/apache2triad/">http://sourceforge.net/projects/apache2triad/</a>
- [3] http://www.cms.hhs.gov/
- [4] http://mysql.org/