
Data Warehouse Project: Incremental Issue, January 2004

Overview

Data is received by the warehouse in the following manner:

1. Initial Data Load
2. Incremental Data Loads

The Initial Data Load processes all data from a facility, whereas the Incremental Data Load only processes data that has been entered or modified since the last time the data was exported.

The Initial Data Load is run one time only; Incremental Data Loads are run on a regular basis after that. Once the Initial Load is run, the system begins "flagging" any changes that occur to registration or visit information for inclusion in subsequent Incrementals. When an Incremental Load is generated, all "flagged" items are exported and the "flags" are reset. The Initial and Incremental export programs were installed in Tucson for alpha testing.

A problem was discovered by San Xavier. It was determined that the logic used to track the changes to registration data caused a problem with the RPMS Patient Registration application. The tracking logic has been de-installed in Tucson.

The problem, basically, is if a user makes a change to a patient's information, when the screen refreshes it displays a different patient from the one that was being modified. This error only occurs when the patient's IEN happens to be the same as another patient's Chart Number.

The Issue

The good news is the problem is caused by the Incremental Load so we can continue to alpha test the Initial Data Load process. The bad news is, we can not officially begin the Initial Load process until the Incremental Load export logic has been corrected and re-installed so we can track any changes that occur after the Initial Load.

The Solution

On Tuesday, January 06, 2004 a meeting was held with the developers to discuss the issue and choose the appropriate solution. The meeting was attended by: Lisa Petrakos, Paul Golis, Sue Ehrhart, Shonda Render, Ed Gartner, Don Jackson, and Lori Butcher.

Technically, the problem is with using trigger x-refs. We believe removing the trigger x-refs and replacing them with m-code x-refs will resolve the problem.

The Plan

Programming:

1. Write a new mumps routine to update the audit file used to track changes to registration data.
2. Replace the trigger x-refs that were created for the warehouse with m-code x-refs using the new mumps routing to track changes.

Testing:

1. Recreate the problem scenario in the current test database.
2. Install the new logic.
3. Attempt to recreate the problem with the new programs.
4. Each field must be tested separately to insure the new routine works correctly, so there will be multiple patients with only one field changed.
5. Also test multiple changes for one patient.

Duration

It is estimated to take 3 – 5 weeks to code and test this process.