

RPMS Unique Database ID

Background

During a meeting in Tucson in April 1999, IHS RPMS developers and informaticists discussed the need for a completely reliable method for identifying encounter records, one that would be permanent and unique at the enterprise level and would allow national repositories to accurately recognize encounter records (identical or modified) about the same encounter.

This idea was resurrected during the early planning for a new IHS Data Warehouse during the spring and summer of 2001. NDW planners recognized a need to also identify encounter records about the same encounter from other source systems, and in certain instances among different source systems, and a similar capability for registration records. Therefore developers created and tested unique IDs for RPMS registration and encounter records in the Pilot Data Warehouse project. They accomplished this by creating a unique ID for each RPMS database and then concatenating that database ID with the internal entry number (IEN) for each encounter and registration record.

Following its successful testing in the Pilot Data Warehouse Project (July 2001 through September 2002), IHS decided to implement a modified version of these IDs in the first iteration of the production IHS National Data Warehouse. Because these initial IDs had been generated by “freezing” the ASUFAC of the location of that database at the time the ID was created, these IDs had inherent meaning, contrary to one of the “Desiderata” rules for proper terminologies. Therefore IHS replaced this original unique database ID (one that had six digits) with another that consisted of 5 randomly assigned digits between 10000 and 19999. The remainder of the method for generating the encounter and registration record IDs remained the same; this newer, non-meaningful database ID was concatenated with the record’s IEN.

IHS also decided to also implement these IDs in the legacy NPIRS system. Therefore the unique registration record ID was included in the Comprehensive Registration re-export that was conducted during the Fall of 2001, and the unique encounter record ID was included in the Patch 6 upgrade to the Statistical Record export to NPIRS in the spring of 2003.

How it works

Each RPMS database has one and only one RPMS SITE file containing a single record that includes a number of fields. This file’s “.01” field points to a specific record in the RPMS LOCATION file that contains a field called “RPMS UNIQUE DB ID,” a randomly, non-duplicatively¹ assigned 5 digit number between 10000 and 19999. RPMS uses this nationally unique 5-character RPMS UNIQUE DB ID to generate the 15-character unique registration and encounter codes in the exports to the IHS National Data Warehouse. *As currently implemented, it is critical that, RPMS developers use the SITE file as described to get the correct LOCATION record to obtain the correct RPMS UNIQUE DB ID.*

[Note: In addition, the RPMS SITE file contains another field, called “LEAD DIGITS FOR RECORD IDS,” that contains a 6-digit code that is the “frozen” ASUFAC code. This field was populated by taking the ASUFAC of the record in the RPMS LOCATION file that was pointed to by the “.01” field of the RPMS SITE file at the time of the creation of this field. This field was

¹ This number is assigned by the RPMS DBA so that it is truly non-duplicative at the enterprise level.

used during the Pilot Data Warehouse Project and by the legacy NPIRS system, but will no longer be used (as explained above in the “Background” section.)]

Assumptions

1. The RPMS SITE .01 field is static.
2. All exports use the RPMS SITE pointer to the LOCATION file.
3. The method for assigning these IDs is consistent and creates a truly unique ID.

Note: To maintain consistency across the enterprise, RPMS and NPIRS DBAs must communicate well.

Proposed Change

To reduce risk for error, rather than use the current pointer to another file to get the RPMS UNIQUE DB ID, we propose to add this field to the record in the RPMS SITE file and use this field instead to generate the various unique IDs.