Partially Automating the Casefinding Audit Process

Scott Riddle, B.S. ● Nankee Singh, CTR

Cancer Registry of Greater California

Introduction

The Cancer Registry of Greater California (CRGC) performs casefinding audits in order to have an objective baseline of how well a facility is reporting cases. The CRGC will request a listing of the Medical Records Disease Index (MRDI) for a specified time period and query our Database Management System (DBMS) to see if cancer cases were reported. If a case is not in our database then we ask the facility abstractor to investigate and explain why any identified cases were not in our database.

Manual Madness

Casefinding audits were being performed manually using whatever the facility cared to send. The types of information received varied – anywhere from faxed reports to formatted spreadsheets. The process of performing an audit was conducted in the following manner:

1. The MRDI Listing was printed if a file was not received.
2. For cases that had a reportable ICD-9 diagnosis, the Auditor manually queried our DBMS to see if it had been reported by the facility.
3. If the case was not in our DBMS then the Auditor manually entered the case information into an *Excel Follow Back Spreadsheet*.
4. Once the DBMS look-up portion of the audit was completed, the Auditor sent the *Follow Back Spreadsheet* to the facility for further investigation.
5. The facility investigated the cases listed on the *Follow Back Spreadsheet* and determined whether or not each was reportable.
6. The *Follow Back Spreadsheet* was returned to the Auditor who then monitored the facility's transmit submissions to ensure all missed reportable cases made their way into the DBMS.

Meeting of the Minds

The Auditor and Programmer met and determined that a casefinding audit process should do the following:

1. The facility information needed to be delivered electronically.
2. Manual querying of the DBMS should be reduced and made as easy as possible.
3. The system should keep track of progress.
4. The *Follow Back Spreadsheet* should be generated from within the program.
5. The system should be used to track missed cases to help determine when all missed cases were reported. The audit is deemed complete when all missed cases have been reported.

Details, details…

Electronic Information
We created a document that details the items in an Excel format necessary to import the facility's MRDI information into our new program. We will provide this information with our data request.

Collating the patient information
The program collates the patient and associated MRDI information so that all related information is shown and processed together.

Internal linkage
The facility information will be linked to the DBMS information and the results will be provided on Matched and Non-matched screens.

Progress counter
A running total of reviewed and non-reviewed cases will be displayed on the main screen.

Tracking missed cases
Once the *Follow Back Spreadsheet* is returned, the Auditor flags the missed cases in the program for ease of tracking.

Midstream Enhancements

After the first audit using the program was completed, two enhancements were added to speed up the process even more.

Changing the status
The status selection was changed from a drop down list (requiring 2 or 3 mouse clicks) to a radio button (one mouse click).

Excluding non-reportable entries
The second facility used for this new program sent *all* records, instead of cancer only records, for the time period requested. We added a routine to set any entry that did not have any ICD-9 related cancer codes to *Not Reportable*.

Screen Shots

Screens were created to make distinct steps for each process.

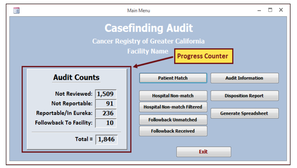

Figure 1. Main screen showing audit counts

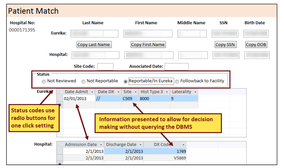

Figure 2. Patient Match screen

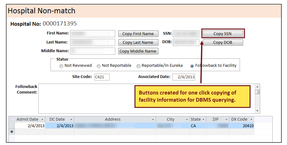

Figure 3. Non-match screen

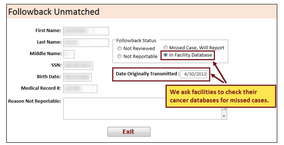

Figure 4. Followback screen used to record results from *Follow Back Spreadsheet*

Comic strips generated using toonlet.com

Results

	Facility 1	Facility 2
Annual Case Count (facility size)	850	175
Medical Record Disease Index Information		
Months of Information Requested	2	4
Total Patients Sent	739	1,846
Total DX Records Sent	1,756	9,069
Audit Information		
Patient Matches to DBMS	739	338
Non-Matches	4	1,508
Follow Back Cases	97	46
Time tracking (Hours)		
Estimate of Manual Audit	38	84
Actual Time using Program	24	18
Estimated time saved using Program	**14**	**66**

Lessons Learned

- Medical Record Departments don't always read the documentation.
- We will need to perform more audits in order to get the program configured to the point where the Auditor can set up an audit without any IT assistance.

Conclusions

By being more concise with facility information request, grouping the information into patient sets, and providing screens that allows for faster DBMS querying, the CRGC was able to save 2 weeks of an Auditor's time with the first 2 audits. We expect subsequent audits to be performed even faster.