Utility of FileMaker Pro Database in Generating Clinical Pathology Consult Reports

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INTRODUCTION:
We recently developed a Clinical Pathology Consult Service that uses best-practice algorithms for the workup of certain autoimmune disorders. Using templates, the average time to generate a report was approximately 3 per hour. As a result, we sought to automate the process further to reduce workload and ensure accuracy. The software that was developed to accomplish this purpose for Rheumatoid Arthritis consults, called RA-EASY is described herein.

METHODS:
FileMaker Pro Database was used as the platform for creating RA-EASY to facilitate Rheumatoid Arthritis consult reports. The results of laboratory tests, physical examination, and imaging studies are entered into text boxes, followed by clicking a button in the user interface to generate reports. A complete draft will appear on the right panel that incorporates all the data input to generate a diagnostic conclusion. The draft is based on a comprehensive algorithm consisting of over 700 lines of database execution scripts. This algorithm thoroughly analyzes all the patient’s data before rendering a complete report. The draft can be edited to incorporate any further clinical judgment by the user for the final report. The user can then copy and paste this report into the laboratory information system (LIS) to release the final report. A draft for an e-mail message to the ordering physician, which summarizes the report findings, is also created by the software and displayed in the left panel. An online version of RA-EASY has been made available on our departmental intranet for clinical reporting.

RESULTS:
Using RA-EASY, efficiency in writing reports is now increased to five reports per hour compared to three with the manual method. In addition, fewer typographical errors were noted due to the nature of automation.

CONCLUSIONS:
FileMaker Pro is a powerful tool in generating clinical pathology consult reports with regards to efficiency and accuracy.

References: