Medstore
A Connection between Grateful Med and ASKSAM

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Background and Description of Medstore

Physicians frequently use the National Library of Medicine MEDLINE as a database of medically relevant literature. [1] Searches are possible on MEDLINE using a simple and inexpensive communication program (Grateful Med) which allows for different levels of searching from a standard desktop computer. Access to this system is quite easy and search strategies and output can be saved.

On a single user level, more and more searches lead to more and more stored output, much of which can be reviewed and data retrieved using any word processing program. More useful processing of this data requires the use of a utility which allows for reformatting of this output such that it may be imported into a database retrieval system.

On the other hand, the database system has to be receptive to text searching, and needs to have the ability to have field length versatility, to allow for abstracts, titles, authors, and medical headings all of unrestricted lengths. More and more database systems with these facilities in mind are becoming available, but for the purposes of this project ASKSAM (ASKSAM systems) was used.

This project was directed towards the following:

1) providing a DOS shell to allow for rapid movement and connection between Grateful Med and ASKSAM programs,

2) allow reformatting of output from Grateful Med and importation of data into ASKSAM. This involved a complicated parsing and string evaluation algorithms, with insertion of field delimiters, indexing to avoid repetitious citations, and memory checking to prevent memory overflows.

3) developing within ASKSAM a hypertext system such that searches, as well as report development could be performed easily and quickly. Because of the complicated importation scheme, reports can be formatted essentially into any bibliography format, including abstracts.

The utility of such a system is obvious, in that it allows the end user to store, review, and manipulate any medical literature searches. Such manipulation can assist the user in forming rapid bibliographies in required formats with little effort. Cost containment is possible by avoiding repetitious searches, laboring through multiple files, and avoidance of expensive hardware and/or systems. The hypertext capabilities of ASKSAM add rapid search capabilities as well. Although many physicians might find themselves too busy to take full advantage of such a system, those physicians who are already using Grateful Med, should find the transition to Medstore easy.

Researchers, and search coordinators who are attempting to cut costs may find such a system also beneficial.

Equipment Requirements

Medstore has been written and compiled in Turbo Prolog (Turbo Prolog Borland International). Pull down menus allow for easy access to the modules of the program. As much as possible a "point and shoot" philosophy has been maintained. The system only requires a MS-DOS compatible computer. Sample searches from Grateful Med will allow for demonstration of the ease of reformatting files. In addition, the hypertext ASKSAM files will be available for review to allow manipulation of the data and report formation.

BIBLIOGRAPHY