SUCCESS OR FAILURE OF AUTOMATED DATA PROCESSING SYSTEMS
IN PHYSICIANS' OFFICES AFTER SYSTEM ACQUISITION

Lisa L. Dahm
Moore Business Systems

ABSTRACT

Although many sources exist for gleaning information relative to acquiring a data processing system, less material is available on the subject of what the purchaser may expect and must do following the sale. The ingredients for successfully automating a medical practice include: a good plan for the conversion and on-going use of the automated system; proper training initially and plans for future training should the need arise; proper physical facilities; and a positive and cooperative attitude.

INTRODUCTION

Many papers and books have been written to guide the physician in his/her pursuit of "the perfect computer" or "the perfect automated processing service." These guidelines are excellent, but as important as the acquisition of the automated system (microcomputer, personal computer, service bureau, in-house system) can be to the medical practice, the importance of what to expect and do following the acquisition can make the difference between the success or failure of the system, thus the positive or negative return on the investment.

Automation of what has previously served both adequately and personably can be disastrous for those who fail to choose, implement, or use their system properly. Needed documents can be lost, expected output may not be generated, patients may be inconvenienced due to confusing and invalid statements, and "computer generated" insurance forms still have to be typed.

The following examples illustrate potential problems which should be considered prior to automating the physician's practice.

Office Manager 1 still files ledger cards in the two drawer file if they are current and in a special tray if they have been turned over to a collection agency. Each month, the copy machine (and the Office Manager) works overtime to photocopy each ledger card. The copies are meticulously folded, stuffed in window envelopes, and run through a postage meter. The process for the two-physician office takes four full days, so the physicians have decided to acquire a personal computer to do the billing.

Another Office Manager (Number 2) in a large multispecialty practice spends the first Tuesday of every month on the telephone complaining to the service bureau because the promised statements are not on-site and they must always be checked prior to mailing. The accompanying aged trial balance, which is necessary to the office's ability to provide accurate answers to patients' inquiries relative to their accounts, is also late.

Everything is progressing according to plan in the third office. Statements and insurance forms are submitted on time, and patient inquiries are normally answered prior to the patient's leaving the office or in a matter of minutes on the telephone. The management reports necessary for making a decision on a capital expenditure have been printed and are in place in the conference room. Today, however, is the last day of work at this office for the computer operator.

Is Office Manager 1 ready to install the personal computer? Was she consulted as to the needs of the office? Has Office Manager 2 explained the problems he is having to the physician? Are the documents that the service bureau requires to generate statements and reports being sent to them on time? Has Office Manager 3 planned for a smooth transition to the new computer operator? Is the equipment on site still sufficient to support the growing practice?

There are myriad automated processing systems available today: personal computers; microcomputers; services where charge and payment tickets from the physician's office are batched, input, and statements and insurance bills are generated; on-line direct processing services; small and large in-house computer systems. Each automated system has benefits and disadvantages. Each is potentially successful although one may "stand out" as the best for a specific practice. However, incomplete planning, improper training, inadequate facilities for system implementation, and lack of cooperation within the office are conditions which have more impact on the system's success than the type of system purchased.

Physicians do not always understand the responsibilities and duties of the business office. They are usually unaware of the crushing paperwork load that has become an integral part of their office until it touches them financially — through employee turnover, lost accounts, significant accounts receivable, and lost business investment opportunities.

Technology has advanced so rapidly in the computer industry that a novice in data processing is at
a loss to judge the merits of one system over another without extensive study. Yet, the office manager and/or the physician are expected to decide in a matter of months about a significant investment projected to last at least several years.

Knowing exactly what is needed in the way of reports, scheduling of statements and insurance bills, and methods of responding to patients' inquiries is necessary to ensure the best possible match between the system and the office. Usually, investigating systems and watching their performance in similar offices will result in the acquisition of one that is potentially successful. However, recognition and acceptance of the necessity for planning, training, physical facilities, and a positive attitude toward the system will ensure a good investment.

Planning
Most of the planning that is done prior to the sale insofar as needs, reports, and schedules can be reused during the implementation of the system. A written plan is a must, as are frequent meetings on the status. At the conclusion of the meetings, it might surprise the physician and his office staff to find that, despite the assurance from the salesperson, the vendor's staff does not arrive on-site and stay until they are no longer wanted. In reality, the medical practice should expect the least amount of support from the vendor as possible. The "hunt" is over, the quarry captured and caged. Now, it's on to another "hunt".

Many vendors will provide more support than advertised, but they still expect the customer to do his part. Guidance is the key word. Usually objectives must be well planned and executed by the medical staff, not the vendor. The vendor's staff will tell the practice why it should do things one way or why it should not do them at all; and many times, the advice will differ from traditional office procedures, but will be a faster or better method of operation. After all, if the medical practice only wanted to accelerate its office procedures, additional people could have been added.

The target date for the system to be fully operational as well as intermediary goals up to that date should be set. If the practice is making a conscious effort to change the way the data, but he/she should know how to do so. Appreciation for the actual computer operator's job and time as well as realistic demands on the system and personnel will result from this knowledge. In the most efficiently automated office, the worst can happen. The main computer operator could leave, and that possibility must be planned for. Having a back-up operator is not superfluous; it is a contingency plan. A new main operator not trained either by the old main operator or in vendor-offered classes can be as detrimental to a fully operational automated medical practice as a main operator who is not trained when the automated system is first implemented.

Manuals which may be accompanied by video cassettes; Computer Aided Instruction (CAI) which uses the computer as the Teacher, taking the pupil through various exercises which mirror projected daily operations; on-site training classes; and classes at the vendor's offices. All can be effective if approached with the proper attitude. However, the most successful and usually the most expensive will be the training at the vendor's offices. The controlled environment and the lack of daily problems and interruptions allow for maximum concentration on the part of the pupil. Structured customer education classes are usually available through the major vendors of in-house systems and of processing services.

On-site training will also be effective although results will not be as quickly apparent. If a vendor does plan to train on-site, a classroom situation should be duplicated as closely as possible. Regular, uninterrupted training hours should be strictly enforced. The sooner and better trained an employee is, the more productive he/she will be and the faster the system will be implemented. On-site training is also available through the major vendors of in-house systems and of processing services although these vendors will probably prefer that the customer attend training at the vendor's facilities.

Self-paced manuals and CAI may be available in addition to on or off-premise training, but they are most likely the only "course" available to the personal computer or microcomputer purchaser. They will be as effective as the office employee makes them. Cursory review will not properly prepare the office employee for the global understanding necessary in an automated system environment. The worst thing the designated operator can do is to leave the books unopened until the practice has the computer and is ready to start converting the current accounting system to the new one. It is guaranteed that the first problem the operator encounters will be one that could have been avoided if the entire manual had been read prior to starting the system implementation.

How many people should be trained? Everyone should have an idea of how the automated system will affect his/her work. At least one person should understand everything about the system -- how to run it, how to request and receive necessary management information, how to structure input so information can be readily available when needed. The designated system manager -- provided there are additional office personnel -- may not actually input the data, but he/she should know how to do so. Appreciation for the actual computer operator's job and time as well as realistic demands on the system and personnel will result from this knowledge.

In the most efficiently automated office, the worst can happen. The main computer operator could leave, and that possibility must be planned for. Having a back-up operator is not superfluous; it is a contingency plan. A new main operator not trained either by the old main operator or in vendor-offered classes can be as detrimental to a fully operational automated medical practice as a main operator who is not trained when the automated system is first implemented.
Physical Facilities

If the automated system chosen is a microcomputer or an in-house system, the physical facilities can also be an important facet of the installation that are overlooked. Regardless of what has been said in the pre-sale conversations, a computer is not like a lamp or a chair. It is a sophisticated and complex piece of electronic equipment which needs as much care, if not more, than any person in the medical office.

A dedicated electrical plug should be provided for every unit of the computer system. Coffee pots, copy machines, or desk lamps should not be plugged into the same line. If electricity is used for one of those units, the resultant peak or valley to the computer can cause misinformation to be written to the storage media. This will mean corruption of a patient’s account at the very least and could result in extensive data base corruption.

Air conditioning, too, is important even if the “computer room” is the only area of the practice that is air-conditioned. Air conditioning will provide cleaner air and eliminate contraction and expansion of computer media which will result in unusable media.

The larger the computer, the more air conditioning is required. The temperature inside the computer must remain constant and no higher than specified by the service technician. To meet this requirement, the room temperature (outside the computer) will have to remain within a specified range—usually between 68 degrees to 74 degrees Fahrenheit.

Now that all the work will be done on and by the computer, work space around the computer is a must. Although space in most physician’s offices is at a premium, investing in a computer and installing one is analogous to hiring an additional employee. No one expects an employee to work in the back corner of a closet that is cleaned once a year. Neither should a computer be expected to work in those conditions. And because the human employees will be sitting down to put information into the system, the more space available for them to review and input information, the better.

Attitude

This one small word can spell success or failure for the system. If one person in the office is against automation, the installation can be a disaster. Sabotage is not uncommon in offices where a new system has been introduced without explanation or consultation of office personnel.

Regular status meetings where cooperation is stressed as a key word will allay some of the fears of current personnel that they will be replaced by the system. The system may allow people to perform their jobs better, therefore securing their positions, not threatening them.

SUMMARY

The acquisition of an automated system by a first time data processing user can be difficult. Guidelines are available in books and magazines which, if followed, will provide invaluable instruction and direction to ensure choosing the proper system. However, once implemented, an automated system may fail for reasons other than insufficient equipment or programming. Lack of comprehensive planning for today’s needs as well as future requirements after the system has been acquired will cause even the perfect system to fail. Improper personnel training or inadequate physical facilities can lead to a negative attitude toward the personal computer, the microcomputer, the service bureau or other processing service, or the in-house system. Any of these insufficiencies will compound the natural conversion setbacks inherent with any automated system.

Addressing each of these prior to and following the sale will help the physician contemplating an investment in an automated system realize the maximum benefit from his investment.