Accounting Systems and Patient Receivables: Complementary Management Areas*

RICHARD J. VARGO, Ph.D.
Associate Professor, School of Business Administration, College of William and Mary, Williamsburg, Virginia

The first segment of my discussion will deal with medical accounting systems and my evaluations of those systems. The second part of the paper will deal with the topic of improving the cash flow from patient receivables. Cash flow is in many ways dependent upon the effectiveness of a doctor's accounting system, and if the system works well and produces timely and accurate information, the cash from patient receivables will flow more efficiently.

I. ACCOUNTING SYSTEMS. Accounting is the art of collecting, summarizing, analyzing, and reporting in monetary terms financial information about an organization. The definition of accounting and its underlying data systems is equally applicable to a large corporate structure or to a medical practice, whether it concern a solo practitioner, clinic, large group, or other organization. The analyzing and reporting aspects of accounting are sometimes called "management control." The process of managerial control assures that resources are used efficiently within the organization. It is in this control area that many doctors have needed business and medical consultants. The extent and quality of managerial control tends to be a function of the accounting system being used.

The systems reviewed here are not complete. They are a sub-set of that part of the doctor's full accounting system which deals with bookkeeping and billing. While a Certified Public Accountant may keep the records for personal assets and liabilities, and calculate the depreciation on equipment for tax purposes and net income each year, the accounting system most important to the doctor is the one that revolves around patient receivables.

Traditional Manual System. The most common accounting system found in medical offices has been a manual system. The manual system (I call it the "write-it-twice" system) is a safe one if (1) set up properly and (2) well-maintained. Problems arise more frequently in the latter category because, while most physicians realize that the system they use is all-important, and they get professional assistance to set it up, they or their office aids are deficient in maintaining it. For example, while I was in Los Angeles, I did some consulting work for a medical data-processing computer firm. Part of the computer operation involved converting a doctor's old system to the computer system. The firm had an entire conversion process using girls who would go into the doctor's office and handle the work. On the very first conversion, the girls found that patient charges had not been posted to the patient-ledger cards in six weeks! The payment postings were more up to date but still weeks behind. Four or five girls had to be placed in the doctor's office to post six weeks' worth of patient charges and some payments and, in addition, maintain the current business.

The problem with maintaining the manual system is that one has to write the transaction twice. Many doctors use a patient-visit slip where he writes the specific service that was performed and possibly the charge. He then gives it to his office assistant. The office assistant collects the patient-visit slips and enters the information in a day-book. The day-book shows a chronological listing of patient charges and payments. The doctor may desire a separate day-book for in-office calls, hospital calls, and house calls. This makes the system more complex, for there may be two or three separate input documents to handle and each possibly a different size and shape. Also, there is a greater probability for a lag to develop between performing the medical service and entering it into the day-book. The office assistant has to write service charges and payments into the day-book separately. Unfortunately, the information may be transferred from the patient-visit slip improperly, or it

* Presented at the program, The Business Side of Medicine, April 7, 1972, at the Medical College of Virginia, Richmond.
may be recorded incorrectly at the hospital by the doctor. If everything goes well, all of the proper charges for medical services performed and payments received will be entered in the day-book. Sometime later the information recorded in the day-book is transferred to a patient-ledger card. Each family, each responsible party, or each patient, depending upon how one organizes the records, has a card which contains a history of charges for medical services rendered, payments received, and an ending balance, if any. Much of this information is used to send out monthly patient statements.

Since the transfer, or posting from the day-book to the patient-ledger card, is done when time is available, it is possible that if very busy with patients, the office aid is not going to have much time to handle the accounting work. A situation could arise where a patient will receive a statement for medical services already paid for simply because this has not yet been reflected on his or her patient-ledger card. Conversely, a patient may go for months before receiving a bill for services performed.

The traditional manual system has its defects, and it is not the most functional system possible, but it is safe.

The "Write-It-Once" Approaches. The write-it-once accounting systems can either involve accounting machine processing or a pegboard variation. With accounting machine processing, the office aid accumulates the patient-visit slips and periodically enters the charge and payments received on both a day-book and a patient-ledger card at the same time. In other words, they are superimposed on each other, and the machine handles both at one time. A separate card is used for the day-book, and in back of that is placed the proper patient-ledger card. In some systems, a bank deposit slip might be placed in back of the patient-ledger card.

An office aid may need special training to handle the machine system, or the services of a trained operator may be required. What happens if they are ill? Further, an accounting machine is a fairly expensive piece of equipment. Given the cost and capacity of the machine and a doctor's usage rate, possibly an alternative is desirable. Also, and more important, there is still a lag in posting with the machine approach to a write-it-once system. An office assistant accumulates the patient-visit slips and a list of payments made, and uses the machine whenever there is free time. Again, it is possible that a patient will be billed for charges already paid because of the posting lag.

Among the write-it-once approaches, the pegboard system is simple and inexpensive and, in addition, prevents posting lags and errors from occurring. A pegboard system consists of a clipboard fitted with pegs down one edge which hold the necessary forms "in register." In other words, forms are arranged on the pegs and held in proper order. The first form will typically be a patient-visit slip, for the charges for services performed, or a receipts slip, for any payments received. Underneath the patient-visit slip or receipt slip (through carbon), lined up "in register," is the day-book. Thus, charges and payments are entered into the day-book simultaneously. Beneath the day-book (through carbon) is the patient-ledger card. Possibly below those forms (with strong carbon) is placed the daily bank deposit for payments received. All of these forms can easily be lined up and handled by just writing the transaction once.

The pegboard system, like the traditional manual system, is safe but not optimal. However, if a doctor does not want to go into computer processing, it is probably the closest he can come to a truly efficient system.

With the systems described thus far, patient statements must be prepared and distributed at the end of the month or on a cycle-billing basis. These statements have to be typed or photocopied from the patient-ledger cards. Further, under these systems, insurance reports must be done by hand with the patient's name, medical services performed, doctor's code number, and charge typed out on the insurance form from the patient's ledger card.

Computer Systems. The State of Virginia is very fortunate to be behind in the area of computer systems. The states of New York, New Jersey, Connecticut, and California, because of their high population density, have been besieged, beginning about six or seven years ago, with computer data-processing firms. With a medical computer system for receivables, the end result is either fantastic or disastrous. There doesn't seem to be any middle position.

Four types of medical data-processing firms have been established. First are the software companies. They moved into this area to spread their fixed overhead over more operational packages. Most of them had very little expertise in understanding the operations and intricacies of a medical office. Many of them did not provide computerized insurance reports as part of their service. Many of them really did not give very much thought to the medical data-processing area. It was a sideline to them. Further, some of them developed a cash problem and would have liked to develop a solid medical data-processing service
but didn't have the funds. If a doctor had signed up for their service and were one of seven on the system, whatever problems existed were there to stay. There was no money available to get rid of the "bugs" and to develop the program further. Because of low liquidity and dissatisfied doctors, among other things, many of these companies have gone out of the medical data-processing business. It is easy to imagine where that leaves the doctor.

The second group of data-processing firms have been the individual proprietorships, started mostly by persons with a computer programming background. The individual knew a few doctors and thought it would be a good idea if he put together a package to handle their bookkeeping and billing. There are probably thirty or forty such individuals in Los Angeles who in their spare time, at night, or on weekends, handle doctors' accounts. Many have signed up only one or two doctors and found that their sideline business is unprofitable to them. Here again, many have dropped out of business. This leaves the doctor in a very precarious situation as far as his accounting records are concerned. Some of the individual proprietorships, however, have been successful and sold out their businesses to larger data-processing firms.

The next category of firms going into the medical data-processing area were a number of commercial banks. These banks moved into this area in order to use up their excess computer time and to gain additional bank deposits. Banks have been only moderately successful with the service; their programs are fine and safe but are rarely comprehensive. Most bank programs have excellent methods of maintaining patient receivables and coming up with delinquency reports, but they don't furnish insurance forms. This deficiency occurs because a computerized insurance report requires a thorough understanding of the medical business and the design of good input documents that are geared to each medical specialty. Both take time and funds.

In the last category, are the true, committed medical data-processing firms and proprietary drug firms. These firms have given extensive thought to (1) the development of the input forms required of each medical specialty, (2) the computer output necessary for the doctor, and (3) the conversion to a computer system. Unfortunately, some of these firms handle only the larger groups.

In summary, one has to be very careful in the selection of a computer data-processing firm. I think that we, in Virginia, can learn from the mistakes that have occurred in other states. When medical data processing finally is established here in earnest, and I think it will come soon, we will be able to obtain better systems with fewer problems.

Why consider computer bookkeeping and billing in the first place? A major advantage is that it probably will increase cash flow. If the system is good, a doctor will have systematic and accurate bookkeeping and timely billing, as he should have under the write-it-once systems. In addition, he will also receive a delinquency report. A delinquency report shows information about patient accounts that are 60 days old, 90 days old, and older, such as the name of the responsible party, telephone number, ending balance, age of oldest charge and date of last payment. Naturally, if the responsible party paid something last week, one would approach it differently than if the last payment were made nine or ten months ago.

With a traditional manual or pegboard system, a delinquency report involves much time (and money). An office aid must go to the patient-ledger file, pull every card that has a balance and figure out how much of each balance is delinquent. The aid then has to calculate the exact age of each balance. Unless a doctor has excess aids in his office, he is not going to get that report in time to exercise good managerial control. A good computer system will furnish the delinquency report. This report probably will help to increase cash flow because it provides information for collection from slow-paying patients. Also, one has quick identification of those accounts to turn over for collection. Further, a good computer program will prepare the insurance reports which have created a bottleneck in many medical offices. A computer system without insurance reports may not be a better buy than a pegboard system or even a traditional manual system.

The second main advantage of a computer system is that it can increase the doctor's productivity. With a good accounting system handling the patient accounts, insurance reports, and billing, the doctor can restructure his organization to allow his aids to work more in a paramedical fashion. I believe it is possible for a doctor to see 10% more patients per week simply through the use of better business practices and procedures, including an advanced accounting system.

When evaluating a computer system, one should look at the conversion procedures, the input documents that are necessary, the output documents that are furnished, and the costs.

1. Conversion: The conversion from one type of accounting system to a computer system
can be smooth or hectic. Determine if the data-processing firm will make a realistic manpower commitment for the conversion. Get some assurance that they will have two or three people in the medical office to sit down with the aids and make the conversion. Do not choose a firm that will come in on Saturdays, do it part-time, or after business hours. Reassure office aids that their jobs are not in jeopardy and that they are going to be assigned different and more important tasks which will contribute to efficiency and productivity. Find out if the firm has a non-technical operating manual. Many of the manuals are supposedly written in English but have been prepared by computer experts. Office aids may be totally overwhelmed with a technical discussion on how they should enter data into the system. Ask how the manual is distributed to your employees. Does the firm merely leave it without explanation, or do they teach it section by section, so that by the end of the conversion the aids will understand it? Finally, ask how long the conversion will take. This is the function of the manpower commitment, but it has been my experience that any conversion that takes more than a month is bad. The success of the conversion to a computer system will depend on both the doctor and the firm. The computer is not a panacea for a poorly run office. The best conversion and the best computer system operate from a well-run medical office.

2. Input Documents: The input required from the medical office is directly related to the frequency of errors and office confusion. Avoid input profusion. Avoid firms that require a sheet for all the in-office charges and another sheet for hospital charges; a sheet for the cash paid in the office; a sheet for all adjustments to the debit side of patient accounts and a sheet for all adjustments to the credit side of patient accounts; and yet another sheet for accounts written off. The better firms operate from two or three easily understandable input forms.

3. Output Reports: Very few medical data-processing firms have found a balance between too little and too much information. I have prepared a detailed list of what I consider to be the output necessary for effective management control: (1) a financial summary giving totals for beginning patient receivables, total charges for the period, total payments for the period, total adjustments, and the ending balance; (2) insurance reports printed up by computer; (3) a summary of insurance reports giving the name of the patient, the carrier involved, and the amount billed; (4) the monthly patient statements printed up by the computer; (5) the delinquency report; (6) a medical service report telling the doctor which medical services he performed during the period, the dollar-volume of each medical service, and the percentage of each medical service to the total charges for the month; (7) the daily journal, which is really the day-book, and (8) a patient's transaction report giving for each patient a record of his visits with the doctor, charges, and payments.

4. Costs: Many services charge an installation fee of up to $.75 per account. The monthly charges per account should be between $.30 and $.70 per account per month depending upon whether insurance reports are prepared. (Unfortunately, my observation is that unknowingly the medical computer firms have made cost comparison as difficult as figuring out the cost of insurance.) Firms that have gone through the trouble of programming and marketing the computerized insurance reports will cost more, about $.70 per account per month. The average doctor has between 400 and 600 active accounts so the costs can be easily calculated. If and when a computerized system is installed, the objective should not be to minimize costs but to maximize net income. If the computer costs are higher than a doctor's present costs, it may be possible for him to restructure his organization to use his office assistants more effectively somewhere else and thus raise his total net income.

When one is approached by a medical data-processing firm, these additional questions should be asked: (1) How long has the firm been in the medical business? (2) How many doctors are they servicing? (3) Can a doctor on their system (who is not also on their board of directors) be contacted to ask him some questions? Try to avoid the medical data-processing firms that are servicing less than 30 doctors.
Questions and Answers

Question: My diagnoses fail to follow a pattern of repetitiveness. Can I still use a computer system for bookkeeping and billing?

Answer: I think it depends on the input requirements of the data-processing firm. If you get a large firm that handles these things on a regular basis, I don’t think it makes any difference. They would get together with you and design some type of form specifically for you. It will be larger than other doctors’ in the specialties, but I think they could do it. It is probably safe to say, the fewer diagnoses you have the better. It is not the computer that is in question here, it is the data-processing firm.

Question: Did you say a computer system that does not furnish insurance reports may not be economically justified?

Answer: That’s exactly what I said. I’m not convinced that the costs of a computer system minus the insurance reports are justified. After all, you still have to hire or retain the aids to do them.

Question: Can I use a computer system in my rural location?

Answer: You have two problems in rural areas; (1) the conversion factor, in that most of the data-processing firms are located near larger cities and they have to send out crews to the rural location and (2) transmitting your data to the computer and getting the output back. There is one firm in Wisconsin that works through telephone lines and is essentially an “on line system.” You communicate from the rural location to the central processing unit, and the information is fed directly back to your office. Unfortunately, I don’t know what it costs or how successful it has been. On the bright side, we are now getting to the point where tapes and telephone input and output are making inroads.

Question: My accounting system is different from any you mentioned and is working beautifully.

Answer: I should have pointed out originally that the systems I have described are really general in nature and that there are literally thousands of different variations of systems depending upon the doctor’s preferences and those of his accounting advisors.

II. Patient Receivables. In most cases, patient receivables constitute the doctor’s largest asset. Obviously then, the average collection period of patient accounts is vital. With the economic downturn we have experienced nationwide from 1969-1972, the extension of the average medical collection period has been alarming. To what should we attribute this condition? One important reason is that doctors refuse to charge interest on delinquent accounts (which they can do). Picture the individual family—they get their check, they deposit it, they buy food, they pay rent, and the pay all bills where there’s an interest charge, small as the penalty might be. Whatever is left over they give to the doctor or dentist. Some months there is nothing left over, and the doctor has to wait. Next month the doctor sends out another bill, and the same process is repeated. Possibly this time around the responsible party is under a little more duress to pay some of his medical bill. You can easily see that when overtime hours are being reduced or eliminated and employment goes down, the average collection period for the doctor’s receivables increases.

A good accounting system that contains few opportunities for errors and lags to develop and that produces accurate patient statements will solve over 75% of the receivables problem. Whether a doctor has a traditional manual system, a pegboard system or a computer system is not important. If he can distribute at a certain time each month an accurate statement in diagnoses, charges, payments, and total balance, three quarters of the problem may be solved. Naturally my conclusion will vary among specialties. For example surgeons will deal more with insurance companies and third-party payers. Their collection problem would not be as troublesome, except where they recorded incorrectly diagnoses or charges that exceeded certain limits as modeled by the insurance company. Hence, the following discussion on improving the cash flow from patient receivables, is directed mainly toward General Practitioners and Internists.

Thirty days after an original statement has been sent out and no payment has been received, a certain pattern should be followed. A delinquency report is necessary from the accounting system. A good computer system will provide one. If a computer system is not available, an aid should prepare a delinquency report from the patient-ledger cards. In terms of organization, the second month’s statement should be sent out with the knowledge that it is a repeat, and with a dunning message on it. Exactly when a doctor starts dunning and what tone it takes is dependent upon his particular beliefs. If nothing is collected the second month, I would send the third month’s statement with a stronger dunning message and ask the office aid to personally call the responsible party to
find out why no payments are being made. This is to let the slow payers know that the doctor is serious about collecting his receivables.

I have seen some doctors who were more aggressive collectors. After only 30 days, the patient would receive a statement with a dunning message and a telephone call. The third month it might be turned over to the professional collector. Whether or not one agrees with this policy, timely second and third notices with some dunning messages attached are definitely needed. I should mention a service offered by a collection firm in Los Angeles. Their experience has been that if you repeatedly contact people they will pay up. Their system produces 10 increasingly threatening letters four days apart. The computer turns them out like clockwork, which the doctor’s accounting system would generally not do. The firm has achieved a remarkable 42% collection ratio from that system, which beats the national average by about 22%. When the account is so old that it is being sent to the collection agency, one should count on 20% being collected and 80% being written off—that is the national average.

A certain percentage of patients never intend to pay. They received your services and could care less about paying for them. They must be identified early. Others are just slow payers who are going through the bill-paying cycle mentioned earlier. Again, a doctor should tell all patients via timely, accurate billings, dunning messages, and a telephone call that he is really serious about collecting his receivables.

If collection experiences are futile with some patients, the next step is to turn these accounts over to a professional collector. It should be recognized that the reputation of collection agencies is not high. They have been known to use strong-arm tactics in obtaining funds. Look for a firm that collects the money in a “professional” fashion. Be sure to ask these questions. (1) Does the collection agency handle medical accounts with special care. It is probable that there are no firms that handle medical accounts only, except in larger cities. (2) Do they take pains with small accounts? Many collection agencies will obtain a listing of accounts and, being businessmen, will go after the largest ones first. After all, they receive a commission of roughly 50% of all money collected. A number of agencies simply refuse to go after small accounts, yet many bad accounts will be small—$7.00, $10.00, $15.00. The agency should go after those accounts with equal vigor. (3) Does the agency send regular status reports to clients? If they collect the receivables, you want to know that information at the end of the week so you can maintain a regular record on it. Also, by holding back reports, the collection agency can use your money longer. (4) Will the agency take proper legal action if necessary? Many firms are hesitant to start legal action because they have to use their own cash to start the process, and they feel that if they are unsuccessful they won’t be reimbursed. A doctor should make it clear to them that he will reimburse them for whatever reasonable costs are incurred. (5) Finally, does the firm charge a realistic fee? The range of fees is from 30% to 50%, depending on local competitive forces. With a 20% nationwide success ratio and up to a 50% fee for money collected, each dollar of patient receivables is worth a dime at this point. Thus, one can see the importance of a good accounting system.

Questions and Answers

Question: When should I send out my statements?
Answer: It would depend upon where your office is located. If you are in a town which is not dominated by one particular firm or institution, you could either try cycle billing, or the first or last day of the month. If you are in an area which is dominated by a firm or institution and they pay their employees on the 15th, then you should think about coming out with your statement on or about the 13th or 14th.

Question: How can I increase the amount of cash paid by patients when services are rendered?
Answer: Ask them. I think if I went into ten offices today, only one or two would ask me if I wanted to pay at that time.

Question: Can I use a collector in my rural setting?
Answer: In a rural setting, I think you should give more thought to using your office aid to obtain cash from accounts. I have always tended to shy away from putting the aids in that position because they can easily visualize themselves being on the other end of the telephone someday, and they are not going to try to collect that cash as vigorously as a professional collector. However, my experience has been in large cities. I would think the use of a professional collector would be more “touchy” in a rural situation than in an urban location.