FINANCIAL STRATEGIES

FOR SURVIVING THE '80s, Part 3

Creating Financial Stability

How much is your business worth? If you don't know, your accounting system is not as efficient as it could be, and your business is probably not fulfilling its growth potential. In the following article, Part 3 of a four-part series on financial management techniques as they relate to emergency medical services, Alan Jameson discusses net worth — how to get it and what it means. Cash flow projections, income statements, and equipment budgets are examined, as well as interest rates and taxes.

Mr. Jameson earned a Masters in Public Health from the University of Michigan. In 1972 he became EMS coordinator for an experimental health delivery system based in upstate New York. In 1974, he became codirector of a national EMS demonstration project in the state of Arkansas. Since 1976, he has been a principal in The Fourth Party, Inc., an EMS consulting firm which has been responsible for many important innovations in EMS organization and finance. Mr. Jameson, who is a Certified Financial Planner, is now based in Ann Arbor, Michigan.

In Part I of this series, I discussed in general terms the financial management deficiencies of our EMS industry during the last decade, and suggested the need for much greater financial sophistication in the 1980s. In Part II, I talked about the "income side" of the ALS system business, and in Part IV, I shall talk about the "expense side" of the system, especially production efficiency.

Most people recognize that there is an important relationship between income and expense. But what separates the men and women from the boys and girls is a complex array of financial tools and techniques for taking control of that intersection where income meets expense. Every dollar of income can be directed to flow through the system's financial channels in a wide variety of ways, and that same dollar can exit the organization to pay for any number of goods or services. Add to that the fact that any particular good or service can be purchased and paid for in several different ways, and that, for the most part, each of these alternatives will have its own unique good or bad effect upon the organization's short-term or long-range financial well-being.

by Alan Jameson

Unless your system has a "sugar daddy" willing to guarantee your loans, it will probably be impossible for you to finance any substantial system upgrading without being able to demonstrate many of the financial tools and techniques discussed in this article. That is because the hand-to-mouth financial perspective of most ALS systems makes it impossible to demonstrate medium or long-range stability.

But even if your system could not benefit from some form of commercial financing arrangement, its management should still be able to demonstrate a full-range of financial controls. Management should be able to define and justify its position on each of the issues discussed here, and a good many more similar financial issues which space limitations will not permit me to discuss in this series.

Financial aspects of an ALS system's operations are probably

more interdependent than any other organizational concern. A success in one area of financial management must be applied to offset a failure in another. In the end, everything you do adds to or subtracts from the same bottom line. Worse than that, a failure in one financial area is likely to impair performance in several other financial areas. Little failures tend to compound themselves.

For example, a mistake in managing employee sick leave policies may show up perhaps years later, as a whopping and unexpected contingent or long-term liability. Overall net worth is then less than expected, thereby messing up a planned partial financing of replacement equipment. The change of plans in funding replacement equipment depletes operating capital reserves, and that messes up the whole cash management program, costing the system a noticeable reduction on the income side at a time depressingly in line with the compounded increase in expense. And it all started with just a silly little mistake in handling sick leave!

If the above scenario somehow seems very foreign to your EMS system, it is probably because there aren't any such plans or strategies to go wrong. If you didn't plan on a $50,000 increase in net worth next year, then you won't be disappointed in a $10,000 increase, and you won't be trying to find out what went wrong so that you can fix it. And if you don't even think about net worth at all (and many EMS managers don't), you may not even be sorry when it declines, because you didn't know it.

Whether your system is public or private, the concept of net worth should be employed as the single most useful indicator of the financial health of your EMS system. Annual changes in your system's net worth will tell you whether you are coming out of the woods or going down the tubes. Net worth is your system's most important financial vital sign, so let's start there.

Accountants don't think like human beings think, so let's avoid accounting terminology as much as possible. If you add up the current dollar value of everything your system owns right now, and then subtract all the system's debts and current financial obligations, what's left is net worth.

The value of a big financial net worth is that it gives the system some breathing room. With enough net worth, the system can survive bad times, or rainy days, bad luck, an occasional mistake, and for a while, even bad management. A declining net worth is the same thing as falling blood pressure. If your system's net worth declines long enough, financial death is inevitable.

Every manager who thinks about net worth at all usually has some gut feeling about how much net worth is enough to prevent loss of sleep. The bigger the system, the more net worth is needed to allow the manager to worry about something else.

We advise our EMS clients to work the system into a position where it has a net worth equal to approximately one year's total budget. For example, Tulsa's EMS system will spend about $2.1 million next year including replacement fund deposits, and it's current net worth is approximately $1.1 million. That means Tulsa's system is in fairly good overall financial shape, but should continue to build net worth for a few more years.

This brings up the question of net worth trend. In most cases, the systems we have worked with started out with zero net worth or with a net worth well below zero. This is often the case with a new system or one experiencing a major overhaul. Plans must be laid and effectively pursued to build those vital signs over a four-to-eight year period to achieve a safe

"Money comes in, money goes out — but what happens in between counts too."

"The hand-to-mouth financial perspective of most ALS systems makes it impossible to demonstrate medium or long-range financial stability."

net worth level. During this critical time of growth, all the signs and symptoms must be monitored closely. Management must be ready to make numerous mid-course corrections. At this critical stage, the system has no breathing room — i.e., too little net worth to survive many mistakes.

All by itself, net worth is a useful concept for checking out an EMS system, and annual changes in net worth probably tell you more about the financial health of your EMS system than any other single indicator.

But net worth can come in several forms, not all equally desirable. This brings up the important question of "liquidity." The most "liquid" form of net worth is cash in the bank — more specifically, in the checking account. At the other extreme might be money tied up as equity in the ambulance facility — a facility so located, designed, and equipped as to make it nearly useless to anyone who is not in the ambulance business.

The entire question of net worth liquidity is far too complex to discuss here, except to say that some judgment is necessary to achieve a good mixture of assets and liabilities which, combined, create net worth.

Monitoring the Vital Signs

As valuable as net worth is as an indicator of your system's financial well-being, it falls far short of providing adequate information for a diagnosis. There aren't any very good analogies to patient care, but the closest one I can think of might be blood pressure. If all you knew about a patient was that patient's blood pressure and if you couldn't see or touch or know anything else about that patient except blood pressure, you might know that something is terribly wrong with the patient, but what? If the pressure is extremely low or even extremely high, and that is all you know about the patient, you would know practically nothing that would help you diagnose the problem or decide upon corrective action. Furthermore, if all you knew about a patient was that his blood pressure was within normal limits, you couldn't even be sure that he was

"If you add up the current value dollar of everything your system owns right now, and then subtract all your system's debts and current financial obligations, what's left is net worth."

otherwise okay. Monitoring his blood pressure changes over a period of time would help some, and might even allow you to rule out a variety of possible problems.

That's about how it is with monitoring net worth. If net worth and its changes are all you know about the financial condition of a system, you may sometimes be able to tell that a huge problem exists, but you won't know what it is or what to do about it. And even when net worth falls within the "normal limits," you can't be certain that the system's financial condition is sound, but you might be able to rule out a few possibilities.

To monitor the financial health of the system adequately, you will need routine access to the following kinds of reports:

1. *Detailed Cash Flow Projection and Variance Report.* If you could have only one piece of detailed routine reporting on your system (other than net worth analysis), it should be a regular report showing projected versus actual month-by-month cash flow in the system. To be really useful, the cash flow projection should extend for about three years into the future, and should project on a month-by-month basis all income from all sources (strictly cash), all expenditures in all categories (cash again) including contributions to replacement fund deposits and other cash outlays that are not actually "expensed" in the traditional accounting sense, and with both monthly and cumulative operating fund activity shown as the bottom line.

The financial breakdown on both the income and expense sides should be fairly detailed, and projected expenditures should relate to the annual budget. That is, if you added up all of the month-by-month expenditures projected for fuel for a 12-month period, it should about equal the organizations's projected annual fuel budget. (As a practical matter, the traditional annual budget can be abandoned if the month-by-month expenditure projections are authorized in much the same way as a budget is authorized.)

We advise our clients to keep a tight focus upon cash flow for a variety of reasons, mostly related to the fast-paced nature of our industry, and the complex and often delayed collection process in third-

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party reimbursements. Cash flow projection and monitoring provides management with the essential information necessary to make mid-course corrections before it is too late.

What do we mean by "too late?" If replacement fund deposits are building more slowly than the related equipment is wearing out, you might find yourself without equipment, replacement funds, or even borrowing power if the problem isn't noticed and corrected months or

even years in advance. If the unadjusted collection rate that was originally projected isn't panning out, or if gross billings are down due to lower than projected utilization, rate structure or collection policy adjustments will have to be made seven or eight months in advance of the critical impact, due to the lengthy "collection lag" associated with third-party ambulance billings.*

2. *Income Statement.* Monthly and annual income statements for the system should be prepared using normal accounting procedures with only minor modifications to accommodate the peculiarities of our industry. Staff members tend to pour over the more management-oriented information of the cash flow projections, while board members or other policy makers can usually get by with looking at the bottom lines on the income statements and balance sheets. The income statements and balance sheets tell us about our net worth and how it is changing, while the cash flow projections and variance reporting help management diagnose any problems and design solutions. Of course, it is entirely possible that the growth of net worth may be perfectly on schedule, while the entire cash flow projection is in a shambles. When that happens it means that you are succeeding, but not the way you intended to. We should all have such problems.

3. *Balance Sheet.* The income statement essentially summarizes income and expense, and reports the difference. It tells you, in conventional accounting terms, whether you made money or lost money for the reporting period. Keep in mind that it is possible to "make money" while running completely out of cash. The balance sheet looks at the system in a slightly different way. Reported monthly and annually, the balance sheet tells you how the system's all-important net worth is changing, and what form the net worth is taking. The balance sheet contains a wealth of information, not the least of which is providing the number to calculate the system's debt-to-equity

*(If there are accountant readers, you may be interested in knowing that an accrual approach can mask several kinds of income-related problems for months, while a conventional cash approach can do the same on the expense side. Thus, for management accounting purposes, a hybrid cash/accrual combination system which emphasizes cash on the income side and, to some extent, accrual on the expense side should be employed. The result is a primarily diagnostic budgeting and reporting system that bears only slight relationship to a conventional income statement or balance sheet.)

Figure 1

Ambulance Authority Assets

Current Assets			
Petty Cash		$ 50.00	
Cash in Checking		30,728.10	
Replacement Fund Account		11,567.00	
Marketable Securities		644,725.00	
Accounts Receivable-Trade	$ 695,384.67		
(Less) Bad Debt Reserve	250,338.46		
Total		445,046.21	
Travel Advances		3,104.89	
Inventory		18,122.04	
Total Current Assets			$ 1,153,343.24
Property and Equipment			
Furniture and Fixtures	2,487.66		
Depreciation Allowance	19.00	2,468.66	
Truck Chassis	178,208.18		
Depreciation Allowance	4,438.54	173,769.64	
Patient Compartments	221,905.63		
Depreciation Allowance	1,849.21	220,056.42	
Communications Equipment	217,499.46		
Depreciation Allowance	1,357.95	216,141.51	
On Board Equipment	197,057.18		
Depreciation Allowance	2,995.86	194,061.32	
Maintenance Equipment	6,134.93		
Depreciation Allowance	46.01	6,088.92	
Other Equipment	545.00		
Depreciation Allowance	4.09	540.91	
Leasehold Improvements	12,137.99		
Amortization Allowance	.00	12,137.99	
Total Property and Equipment			825,265.37
TOTAL ASSETS			1,978,608.61

Ambulance Authority Liabilities

Current Liabilities			
Accounts Payable-Trade		$ 1,028,633.13	
Contracts Payable		41,560.57	
Current Maturities		128,400.00	
Total Current Liabilities			$ 1,198,593.70
Other Liabilities			
Deferred Income-Subscriptions		11,328.00	
Total Other Liabilities			11,328.00
Long-Term Debt			
Equipment Lease-Long Term		760,885.71	
Total Long Term Debt			760,885.71
TOTAL LIABILITIES			1,970,807.41

Equity

Equity			
Prior Earnings		1,758.29	
Retained Earnings (Current)		6,042.91	
Total Retained Earnings		7,801.20	
Current Net Worth			7,801.20
TOTAL LIABILITIES AND EQUITY			$ 1,978,608.61

ratio. This ratio presents still another measure of the system's stability apart from net worth. Like the question of "liquidity," the debt-to-equity ratio tells you something more about the remaining borrowing power of the system, and how far it has stretched itself financially. In a new or recently-overhauled system, it is likely that the debt-to-equity ratio will be very high, and it should become a goal of competent management to gradually reduce that ratio while simultaneously building net worth and establishing reasonable liquidity.

As Figure 1 shows on a monthly balance sheet prepared for a recently overhauled system, the debt-to-equity ratio reveals a situation which will take considerable improvement before any new commercial borrowing can occur.

4. *Capital Equipment Budget.* The importance of having adequate quantities of very high quality equipment will be discussed in more detail later in this article in the section on equipment financing. In that section, you will learn that our industry, for the most part, is sadly unsophisticated in its understanding of both the value of good equipment and the benefits of various forms of equipment financing. And in many systems, even the process of budgeting and planning for equipment purchases and replacements closely resembles a child's Christmas list, with prices added.

Money used to come into the equipment budgeting process by way of federal grants and gifts from local government. Increasingly the capital

"In many systems the process of budgeting and planning for equipment purchases and replacements resembles a child's Christmas list, with prices added."

equipment budget derives its income from various sorts of financing arrangements, replacement fund deposits from earned income, or by some combination of these. In more poorly managed systems, "emergency equipment purchases" are financed by raping the operating budget or the operating capital fund. A good manager will find such practice an embarrassment, while a bad manager may see the same practice as "business as usual."

Assume the following:

- Very good equipment is essential;
- Insufficient quantities of equipment create expensive emergency repairs and scheduling adjustments;
- All equipment wears out and the timing can be reasonably well-projected and to a great extent controlled;
- As soon as a new piece of gear arrives, plans should be laid for financing its replacement;
- Maintenance incentives from top to bottom must be created;
- We all wish we could afford more equipment.

If each piece of equipment in the system is set up on its own estimated replacement timetable (and it should be), then nearly every month one or more pieces of equipment will reach life expectancy, and the plans that have been laid to finance the replacement should have matured. When that happens, funds are transferred, usually, from replacement fund investments and/or proceeds from loan or lease arrangements to the capital equipment budget. Thus, the capital equipment budget balance fluctuates monthly, or at least quarterly, as money becomes available for new or replacement equipment and as funds are encumbered or paid out for equipment purchases. If maintenance incentive programs are effective, the capital equipment program may actually show a sort of "profit," as equipment life is extended beyond scheduled replacement dates. However, such a sophisticated orientation also requires that the cost of maintenance incentive bonuses, as well as extended maintenance costs, are also paid out of the capital equipment budget, since the "net savings" from these programs must reflect full cost. (More on maintenance incentives in Part IV of this series.)

To keep track of what is happening with the capital equipment budget, the reporting must show not only a budgeted amount in each equipment category, but must also keep track of equipment that has been ordered but not received, received but not paid for, and that which has been ordered, received, and paid for. You can see, therefore, that in each equipment budget category, there are several budget balances: true surplus funds (i.e., funds which have been accumulated and are not earmarked for the replacement of any specific equipment item); earmarked fund balance (i.e., unencumbered funds earmarked for known equipment purchases); and encumbered funds (i.e., funds reserved to pay for equipment which has been ordered and/or received but not yet paid for). A

sample display of this kind of information is provided in Figure 2.

All of this probably sounds more complicated than it really is. The thing to keep in mind is that the capital equipment budgeting process must anticipate and plan for both the purchase of equipment needed today, and the replacement of that same equipment years later. And if the system intends to expand the range or quantity of its service delivery, the capital equipment program must also manage and account for net increases in the system's total equipment inventory, and must then plan to replace that equipment when it wears out.

If your capital equipment budgeting process is working properly, you should be able to get fairly accurate answers to the following kinds of questions:

- Is our equipment being replaced more rapidly than we had anticipated?
- How much do we plan to spend during the fourth quarter of 1985 on equipment replacement?
- How soon will the financing be accumulated to replace the chassis on Unit 121?
- How are we financing the equipment we must purchase next month, and how do we plan to change our equipment financing arrangements by 1986?
- What percentage of our total annual operating cost is attributable to the true cost of purchasing and replacing equipment?

(If your system "expenses" equipment purchases, rather than capitalizing such purchases, chances are your management has no idea of the true cost of equipment in your system.)

Appropriate capital equipment budget reports, combined with equipment inventory sheets which keep track of replacement schedules for every equipment item in the system, and future financing policies and goals, with documentation and reporting on any maintenance incentive programs, all add up to an effective capital equipment program. If you don't plan for the replacement of each piece of equipment at the time it is acquired, taking positive steps to save up for the replacement or to arrange for future financing of the replacement (a combination is usually the case), or if you fail to take into consideration the estimated inflation in such replacement costs over the life expectancy of the item, then your approach to equipment budgeting and financing is deficient and amateurish — the sort of business practice that was epidemic throughout our industry in the 1970s.

Good Equipment, Plenty of It, and No Excuses

It is now almost ten years ago that I heard colleague Jack Stout making fun of the way the Feds were spending grant monies in EMS. Stout was saying that a financially stable EMS system could get its own equipment, and that a financially unstable EMS system needed to concentrate on getting stable — not on getting more equipment. I even remember him telling Dr. David Boyd that all of the federal money put together wouldn't pay for one year's depreciation on the *present* equipment in the industry, much less purchase America a new ambulance system.

And now I read in the January 1983 Almanac issue of ***jems*** ("The EMS Universe") that "... nearly $250 million will be spent during 1983 on replacement ambulances alone." And that's just the ambulances at an estimated $30,000 apiece.

Stout's point had to do with the fact that, if equipment purchase and replacement is viewed in a more businesslike manner, the true cost of equipment, even sophisticated and exotic equipment, is simply not a major piece of the annual operating expense of an ALS system. Furthermore, the difference to the operating budget of having mediocre equipment versus excellent equipment goes practically unnoticed. To be blunt, there is just no excuse for forcing highly trained ALS crews, who must work under some pretty adverse conditions anyway, to have less than superb equipment.

Let's take an extreme example — Tulsa, Oklahoma. The Tulsa EMS system has no BLS ambulances — only ALS ambulances. Every ambulance in the Tulsa system is equipped with practically every mechanical and electrical gadget known to the industry. There is even a full keyboard computer terminal, screen and all, in every ambulance. Tulsa's EMS dispatch center looks like Steven Spielberg's game room. If there exists a gadget that could possibly do some patient some good, it is in the Tulsa EMS system. Unless you have visited Tulsa, nothing I can

tell you will prepare you for what you will find there in the way of hardware.

Some of that equipment was originally paid for by the city, some by DOT, and about half of it from a commercial bank loan we helped arrange. That's history. Now, every piece of equipment in the Tulsa system is set up on its own *fully funded* replacement schedule, with projected replacement cost inflation ranging between 6 and 15 percent, depending upon the type of item. That means each month Tulsa's management takes some of its income from fee for service billings and deposits that income in replacement fund investments. *Enough money is deposited each month so that sufficient funds are built up over the life of each equipment item to completely pay for its replacement.* (Tulsa also has an effective maintenance incentive program that tends to extend equipment life, but this will be discussed in Part IV of this series.)

If you want to know the true cost of having equipment (excluding maintenance costs) in the Tulsa EMS system, all you have to do is add up the replacement fund deposits for the year. The funding of *replacement* costs — as opposed to original costs — is the safest and most conservative way to look at equipment financing. If you know what true equipment costs are in the Tulsa system, then you can be pretty sure that your system's true equipment costs (as a percentage of total operating costs) won't be any higher. For Tulsa's fiscal year 81-82, the total "cash-out" cost of system operations (including everything) was $1.776 million. During that same accounting period, Tulsa's equipment replacement fund deposits and comparable debt service totalled $302,688. That's about 17 percent of total annual operating costs.

What does that mean? We can look at it several ways. It means that if Tulsa utilized crummy equipment, perhaps even 50 percent as expensive, Tulsa's annual cost per billable run would drop by only about $11.70. It means that if Steve Williamson (Tulsa's director) could somehow figure out how to run ambulance services using *no* equipment at all, he could reduce the cost per run by about $23.40. In other words, the extreme difference between no equipment and great equipment is only about $23.40 per billable run, so you can see that the difference between mediocre equipment and great equipment is hardly worth talking about, particularly when you consider the awful effects of poor equipment throughout the system.

Shabby equipment ruins employee morale. How can you demand superb performance from your employees while furnishing shabby equipment for them to work with? How can you justify the rates that go with user-financed high performance ALS service, when all the customer can see is crummy equipment? How can you expect physicians to have confidence in the field performance of your organization, when they see you roll up with a critically injured patient in a vehicle that coughs and

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"How can you justify the rates that go with user-financed high performance ALS service, when all the customer can see is lousy equipment?"

sputters, using a monitor/defibrillator that looks like something out of an old Frankenstein movie, and using antishock pants with so many patches you'd be afraid to let your kid use them for an innertube in the swimming pool?

If your system has no respect for its equipment, then the employees won't either. Employees take better care of equipment that deserves better care. Mediocre or worse equipment costs the system in morale, reputation, image, and even money in a thousand ways. These costs far exceed any paltry savings you may realize in monthly payments and/or replacement fund deposits. Tulsa's system is now almost five years old and has had time to establish a fully funded replacement program. In a couple more years, the original commercial bank loan will be paid off, and Tulsa's equipment financing (and net worth) will be fully funded and stabilized.

In newer systems, or newly overhauled systems, managers must rely more heavily upon various forms of loan and lease arrangements, gradually converting to fully funded replacement programs in accordance with a long-range financial plan. The Fort Wayne system, for example, had to finance all of its current equipment, nearly $1 million, and has established a partly funded replacement program designed to debt finance two-thirds of the initial replacement equipment and one-third of the second round of replacement equipment. Hopefully, none of the third round of replacement equipment will require debt financing. Since each equipment item is set up on its own replacement schedule ranging from two years to ten years, depending upon the item, this financial strategy requires many years to reach its goal. However, the system is structured to show progress every single year, and to help safeguard the future we have made portions of this long-range financial plan legally binding under the terms of the current financing contract. Even in Tulsa, the original bank loan allowed the bank to hold a lien on replacement fund deposits with the stipulation that these replacement funds may be used only for replacement hardware and *may not* be diverted by some future manager who wants to make a name for himself in the short run at the expense of long-run stability.

We have used revenue bonds, straight loans, leases, and the hybrid financing arrangement called a municipal lease to finance our various clients' start-up capital equipment needs. Which device is best depends upon the locality, the legal structure of the system, market interest rates, and a variety of other considerations too complex to discuss here. However, if you wish to consider some form of equipment financing for your organization, I suggest keeping the following points in mind:

1. Demonstrate Long-Term Stability. If you can't furnish the kinds of documentation, projections, and financial management strategies suggested in this article, chances are you can forget about any substantial commercial financing of capital equipment requirements. This includes realism on the income side of your business, and some ability to show how you intend to keep your share of the market over the term of the loan.

2. Track Record. Somehow you will have to demonstrate that your organization is controlled by people who have already demonstrated their ability to develop and follow sensible financial plans. That's one of the reasons why various ambulance authority boards of trustees are populated with successful representatives of the local business community.

3. Tax-Exempt Interest Rates. Whether your system is operated by a for-profit company, a not-for-profit corporation or a government agency, you can save almost one percent of your annual operating costs by financing your equipment at tax-exempt interest rates. In today's economy, there isn't as big a differ-

ence between tax-exempt interest rates and taxable interest rates as there once was, but the savings are still substantial. Some minor organizational restructuring may be necessary to take advantage of tax exempt financing, but where there's a will...

4. *Borrowing May Be a Better Idea.* The main reason for pursuing a fully funded replacement program is to improve the net worth of the organization, its liquidity, and its debt-to-equity ratio — i.e., its long-range financial stability. But even after you have reached the enviable position of being able to pay cash for replacement equipment, you may still find it desirable to continue managing your replacement fund investments while debt-financing the equipment, using your replacement fund investments as security to obtain a rock-bottom tax-exempt interest rate on your loans or lease arrangements. That's because you may be able to borrow money at a lower interest rate than you are currently earning on your replacement fund investments. If that's the case, then you would be stupid if you pulled money out of your replacement fund investments and paid for the equipment with the cash. This combination of tax-exempt financing and making income from investments may save nearly two percent in total annual operating costs. Two percent of annual operating costs in most systems can pay the salary of an entire paramedic position, or can raise wages to help attract the best. If a manager could save two percent but doesn't, he's simply not doing his whole job.

5. *Arbitrage Isn't a French Resort.* The word "arbitrage" refers to any financial activity wherein money is made through simultaneous transactions at two different market rates. For example, an investor who monitors a stock or commodity that is listed simultaneously on American and European exchange markets may make money by watching for a difference in the two markets, and then quickly making simultaneous transactions in both places.

Some forms of arbitrage are legal and some aren't. The question comes into play in EMS hardware financing in a variety of complex ways. For example, if you'd borrowed a couple of million dollars at tax-exempt interest rates, then ordered a bunch of equipment, and then invested that

"The main thing is to acquire a central facility that makes day-to-day operations convenient and easy to monitor ... it doesn't make much difference if the facility is owned or leased."

same two million dollars at a higher interest rate than you are paying on your loan until the equipment was delivered and had to be paid for, you could be practicing arbitrage. By paying attention, it's pretty easy to pick up enough money to buy a few extra monitor/defibrillators, even a new ambulance, or to make your first loan payment. Whether what you did was legal or not depends upon following a set of pretty complex IRS rules. About all I can say in the space available here is that you should be aware that the issue exists, that your system can benefit from it, and that you must be careful to follow all the rules.

Facilities Financing

Over the *very* long term, an argument can be made in favor of having the ALS system own its own facility, as opposed to a lease arrangement. The short and medium-range perspective furnishes a less powerful argument in favor of facility ownership. In fact, if your system is partially not-for-profit or governmental in structure, you may be able to lease less expensively than you can purchase, because a private lessor can benefit from depreciation write-offs, interest payment tax deductions, and in other ways that your EMS organization, being nonprofit in the first place, cannot benefit from. If your EMS organization is a for-profit corporation, the owners will probably find it makes more sense to hold the facility personally or in a partnership while leasing the facility to the EMS corporation. (These and other basically sensible business arrangements work to greatly frustrate a local government trying to decide whether a private company's rates and profits are reasonable or excessive.)

The main thing is to acquire a central facility that makes day-to-day management, crew changes, vehicle checkout, inventory control, paperflow management, and all other day-to-day operations convenient and easy to monitor and account for. In my opinion, it doesn't make much difference whether that facility is owned or leased.

Retirement, Vacation, Sick Leave, and Comp Time

There isn't space here to go into compensation plans and benefit packages in detail. However, you should keep in mind that the way these various plans and programs are structured can have a substantial impact upon the organization's net worth, and therefore long-term stability. By the time one of our clients called us, that system had accumulated over $40,000 in comp time owed employees. This liability had developed to such an acute state that so many employees were taking comp time that other employees were assigned mandatory overtime, which created more comp time. Thus, for each hour of comp time taken, one and one-half new hours of comp time were created. The only way out at that stage was to restructure the entire system, refinance everything in the place, and pay off accumulated comp time in cash. (The comp time program was eliminated entirely.)

However your retirement, vacation, sick leave, comp time, and mandatory overtime arrangements are structured, you must take care to structure them in a way that creates a known and maximum, not open-ended, liability. Any such arrangements that create an open-ended liability, such as unlimited sick pay, endlessly accumulating vacation pay, etc., eliminates the possibility of accurate forecasting and casts a cloud of contingent liability over any net worth you may accumulate.

Cash management is one of the easiest and most often overlooked tools an ALS manager can use to stretch the dollars available in an entirely painless way. Effective cash management assumes a very accurate knowledge of projected cash flow. Without such accurate knowledge, it

will be impossible to move available cash into and out of the most profitable available investment vehicles.

A great deal can be done to structure this system's purchases, contracts, income, and compensation plans to make it not only possible to more accurately project cash requirements on a month-to-month basis, but in fact to actually manipulate, to the benefit of the system, the average size of cash reserves available throughout the calendar month. More precise inventory control systems also help to enhance the power of a good cash management program. In one case, we even managed to create an arrangement whereby the EMS Authority was able to mingle its cash reserves with the investments of the local city government to obtain a substantially higher rate of return, without allowing the income realized to go back into the city's general fund.

Backing Into Your Budget

In the past, EMS managers often budgeted by figuring out what it cost them last year, adding some known increases, and then making a "wish list" for more stuff. Then, hat-in-hand, the manager made his pitch to city administration, the city council, and perhaps one of the sources of grants-in-aid.

Today, and probably for a long time to come, you are much better off working backwards. That is:

- Define the quality, response time performance, range of service and volume of service you are going to deliver;
- Figure out how much you can sell that kind of service for (i.e., fees and subsidies) and discount bad debt — then you know how much money you're going to get for the work you are expecting to do;
- Figure out all of the fixed costs of operating a system of that size, quality, and range of service delivery (e.g., facility lease, fuel, equipment payments, forms, the postage on the billing statements, and all the other costs that are going to be there no matter what you do);
- Subtract all those fixed costs from the income, and you've got a pretty fair idea of what you have left to work with to cover vehicle maintenances and to pay street people, dispatchers, yourself, and so forth.

Then, the only question left is whether you think you can do it. If you don't, then probably you are vocationally misplaced and should consider another line of work. That is because you started this whole process off by figuring out what people are likely to pay for the kind of service you want to provide. While elected officials, the press, taxpayers, third-party payers, and private paying patients are likely to grumble about the cost no matter what it is, it is also true that a community will pay, one way or another, something like a "fair market" price for the kind of service you are capable of producing. (Some cities pay a whole lot more than a "fair market price" for EMS services, but probably not forever.)

"Somebody out there can make it work, and if you can't, be prepared to change your system's ways or be replaced by a higher performance organization."

Therefore, if you based your projected fee structure/subsidy combination and your projected collection rate upon some sort of comparison with the experience of other similarly qualified and reasonably efficient ambulance services throughout America, then by definition, somebody out there can make it work, and if you can't do it, then you should prepare to change your system's ways or prepare to be replaced by a higher performance organization. (No one ever called us to say that their EMS system is working wonderfully, but would we help them replace it anyway.)

We Can't Do It Here

I can't say I blame you if your tendency is to discover all the really great reasons why almost none of these financial techniques would work for your system. But I encourage you to think again. Most of the techniques discussed above are EMS adaptations of conventional business practices borrowed from mature industries. If there truly are structural barriers that prevent you from using tested financial practices (and there usually are a few,), then you have two choices: don't change anything and continue to use amateur financial management practices; or, figure out how to eliminate those barriers to sound business practice.

A purely private operation can't make good use of several tax exempt financing benefits, and a purely public system will, in most cities, be unable to take advantage of good cash management practices, replacement fund deposits and investments, unusual incentive programs, and so on.

The high performance ALS systems of the future are bound to incorporate a variety of hybrid public/private mixtures to allow the use of sound business practices while taking advantage of the public service nature of our industry's services.. Chances are your system's present structure was never designed with these issues in mind. Some structural tuning-up may well be in order.

High performance ALS systems survive on an extremely narrow income/expense margin. The difference between breaking even and going down the tubes may be only a small percentage of annual cash flow. If your operating capital is small to start with, and if you have no replacement funds built up and no borrowing power to boot, a small percentage loss can put your system completely under. And if you are forced to beg the city council to bail you out, you may get what you want this year and a whole new EMS system next year. (We consultants circle like vultures over the carcasses of dying EMS systems.)

Acting like part of the American health care industry, as opposed to just another local agency, as alluded to in Part I of this series, is the first step. Learning to play in the fee-for-service arena that characterizes America's health care financing system is critical (see Part II of this series). And next month in Part IV of this series, I will talk about a whole range of techniques for controlling costs and improving production efficiency while maintaining extremely high performance all at the same time. But in the industry of high performance prehospital care, management cannot afford to overlook all of the less exciting, more complicated, and certainly less familiar tools and techniques discussed here. □