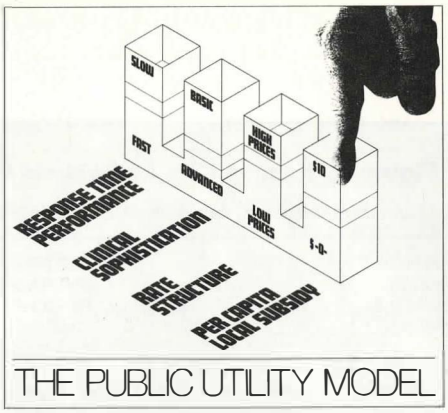

THE PUBLIC UTILITY MODEL

Part III: The Major Constraints

This is the third and final article in ***jems'*** series devoted to the concept of an EMS system as a public utility model. Part I dealt with variables fundamental to any EMS system as they apply to the "Public Utility Model" — a system developed four years ago by a team headed by Author Jack Stout and, since, implemented in Tulsa and Kansas City. Part II outlined and described the structure of the Model itself, and offered specific advice about how to avoid the system's known pitfalls. Now Part III goes into more depth about two major areas in which "constraints" should be built in, in the setting up of the Model.

From reading Parts I and II of our series on the "Public Utility Model," the reader knows that the Model employs a powerful network of financial incentives and corresponding constraints as its means of achieving superior performance at lower costs. We have pointed out that because this "incentive network" is so strong — and the EMS industry is so complex — opportunities for striking bad deals are abundant.

In the development and real-world application of the Model we have identified over 100 "design constraints," proper handling of which may be critical to smooth system implementation and successful long-range operation. However, only two of those will be discussed here — and they are concerned with 1) essential equipment and 2) local financing.

First, provision must be made to ensure that all essential equipment in the system can be immediately seized and operated by the public authority in the event of a major service breakdown. If all equipment in the system is owned by the public authority, and if contracts are otherwise properly written, this safeguard is easily met. However, if some of the equipment is furnished by the contractor, either by way of leasing the equipment from a third party or by direct ownership of that equipment by the contractor, the problem is a good deal more complex.

In several instances we have seen contracts between cities and private operators which state that if the contractor breaches his contract, the city may seize his equipment on an emergency basis, to ensure continuity of service delivery in the interest of public health and safety. In fact, such provisions probably would have no effect at all if the contractor were to refuse to allow the city to take possession of his equipment. That is because it cannot be assumed that a "major breach" has occurred until "after the trial."

In such a case, if the city declared a contractor in breach and the contractor declared he wasn't in breach, then the contractor would probably obtain an injunction preventing the city from seizing his property until the court had determined whether a "major breach" had, in fact, occurred. In the meantime, what happens to service delivery?

by Jack Stout

To deal effectively with this particular "design constraint" in Tulsa, we arranged for the ownership of all equipment in the system in the public sector (some commercially debt financed), with leasing arrangements between the public authority and the contractor having strong financial equipment maintenance incentives.

In contrast, we achieved the same end in an interim contract in Kansas City, Missouri by creation of an independent equipment leasing company whose ownership was the same as that of the private ambulance company, which leasing company, in turn, owned the equipment and leased it to the public authority as primary lessee.

Second, the method whereby local tax dollars are injected into the local service system should be so constructed as to minimize as much as possible the effect of offsetting the legitimate financial obligations of public and private third-party payors. In any service system where local tax dollars are applied on a line-item basis to the ambulance service budget, or to a blanket contract for service with a private contractor who, in turn, also bills on a fee-for-service basis directly, between 35 and 40 cents out of every local tax dollar, in effect, serves to subsidize Medicare, Medicaid and private

Figure 1: Kansas City Ambulance Study

(In most instances, based on 1978-79 estimates.)

CITY	LAND AREA (SQ. MI.)	POPULATION 1976	MUNICIPALLY OWNED & OPERATED	DEDICATED*	NO. OF VEHICLES	REPORTED AVERAGE RESPONSE TIME (MIN.)	APPROX. FEE'+	APPROXIMATE ANNUAL BUDGET	APPROXIMATE ANNUAL SUBSIDY PER CAPITA
Kansas City	316	458,251	NO	NO	14	7.5	$60	550,000	1.20
Austin	154	313,009	YES	YES	8	4.3	$50	2,106,199	6.72
Chicago	222	3,074,084	YES	YES	36	4.0	NO	6,764,149	2.18
Columbus	170	533,075	YES	YES	15	5.5	NO	3,000,000	5.62
Dallas	254	848,829	YES	YES	18	5.0	$50	3,109,000	3.65
Fort Worth	138	367,909	NO	YES	6	6.0	NO	712,500	1.94
Jacksonville	766	532,346	YES	YES	14	5.0	$35	1,700,000	3.20
Los Angeles	455	2,743,994	YES	YES	40	5.0	$35	10,210,585	3.72
Louisville	59	330,011	YES	YES	8	5.5	$30	1,900,000	5.75
Miami	34	354,993	YES	YES	5	3.5	NO	1,396,822	3.94
Nashville	527	430,941	YES	YES	16	5.0	$40	2,100,000	4.88
Phoenix	187	679,512	YES	YES	8	5.1	NO	UNKNOWN	N/A
Seattle	82	490,586	YES	YES	12	4.0	NO	1,264,257	2.57

***Responds to emergencies only.**
+ Minimum Charges

Source: Verlyn J. Leiker, Budget Officer, Kansas City, Missouri

insurance company obligations. In fact, the situation on a national basis is even worse than that. Looking at Figure 1, we can see that many ambulance service systems are billing well below actual costs. Using the term "billable run" — meaning a run on which a patient was actually transported to or from a medical facility — one can discover a substantial number of publicly operated advanced life support systems whose actual total "cost per billable run" is in excess of $400, while the charge per "billable run" in those same systems is but a fraction of that amount. Such systems collect most of their operating revenues from local tax dollars partly because they bill at levels far below cost, partly because they make meager attempts to collect from public and private third-party payment sources, and partly because their actual cost of production is so high that if they did bill at full actual cost, no one would believe it.

The effect locally of such business practices is to use local tax dollars to provide financial relief to the federal government's own insurance programs and those of private insurance companies as well. But the effect of such practices regionally is to drop the Medicare Part B profile so far below fair cost that it is virtually impossible for neighboring communities with large populations of poor or aged people to finance advanced life support services. (The "profile" is the mechanism used to establish fee-for-service allowable charges used by Medicare. The profile, in effect, attempts to average out all the ambulance bills of all providers within a profile region to determine the "usual and customary charges" for that service, and then payment is set at a percentage of those "usual and customary charges." *Any large service provider in a profile region billing far below cost can obviously pull down the profile level below "fair cost," and in doing so, bring any neighboring EMS systems to their financial knees, if they rely upon third-party payments at all.)*

Some EMS service providers have attempted to sidestep this problem by billing insured patients at one level while billing other patients at another level. Where federally sponsored patients are involved, this practice is, simply, illegal.

Problems Yet to be Worked Out

While the Public Utility Model has great potential even in its current stage of development, it still has its problems. In fact, local policymakers trying to decide upon a system design really ought to view their decision-making process as a process of choosing which set of problems they would rather deal with.

Every EMS system management design has built-in problems and disadvantages, and the Public Utility Model is no exception. As in any complex organizational system, every design decision affects every other design decision but, in the case of the Public Utility Model, the force of this interaction is even greater than normal.

Probably the biggest disadvantage of the system, and its deepest pitfall, is its complexity. The Model requires an expert public authority board with equally expert staff. The board must participate in the design and application of the Model to the locality, or they may never understand the system well enough to control.

The chief executive must possess all of the management capability and expertise of a hospital administrator — and the administrator of a fairly large and complex hospital at that. But, in many ways, EMS administration under the Public Utility Model could be considered more complex than hospital management.

Even an EMS system as small as Tulsa's, with its annual operating budget of less than $1.5 million, has

all of the complexity usually associated with a several hundred million dollar per year operation. The only thing missing is the several hundred million dollars.

When we are asked whether we think the concept is so complex that it is impractical to consider on a widespread basis, we must confess that the jury is still out on that one. The board of trustees we worked with in Tulsa eventually became so knowledgeable of their own local application and the logic behind it that any one of those Trustees could handle the toughest question and answer session. They hired professional and competent staff for ongoing administration, and they were willing to pay and respect that staff as professionals. The board we are currently working with in Kansas City promises to be as good.

So, from these two experiences, we are hopeful. On the other hand, in one of the largest public procurements of EMS services to date, the public employee who handled the bid process and let the contract went to work for the winning bidder shortly after the contract was let. This fact is, by itself, not particularly disheartening, but the "deal" that was made, in our opinion, operates considerably more to the advantage of the contractor than in the public interest.

Another problem with the Model has to do with the issue of personnel salaries in the system. In the most inefficiently operated public EMS systems, the main source of waste is poor employee utilization — not high salaries. Therefore, it is possible to contain costs on a long-run basis without necessarily reducing EMT salary levels.

Furthermore, the medical audit and other quality control aspects of the Model, if properly applied, should place a premium upon reducing EMT turnover and retaining the best professional staff available, even if it means higher salaries. We firmly believe that 100 truly professional and dedicated EMTs who are highly motivated, well paid, and who are financially encouraged to achieve higher performance levels at lower total costs, can easily outperform 200 "average" EMTs who are underpaid and poorly motivated.

Thus, *in theory,* when the public sector uses private contractors and focuses upon performance, there should eventually emerge a shift in the entire industry toward use of more professional and better paid personnel who have the ability to do a better job with fewer resources. Unfortunately, the theory doesn't match the truth, so far.

This problem is made worse by the union representation we have seen to date in the industry. Traditionally — though not always — union representatives strive for uniformity. They tend to dislike merit pay and financial incentives for superior performance; they generally promote more uniform shift schedules, and they generally oppose more complex scheduling and compensation programs.

To be truly efficient, an EMS system must use some 24-hour shifts, some 12-hour shifts, and some 8-hour shifts, each with possible provisions for occasional 24-hour "on-call" coverage. In some areas, it may even be appropriate to get more complex than that. When we suggest increasing salary schedules for less desirable shifts to attract volunteers for those shifts, union representatives traditionally fight for a "standard package for everyone." Never mind that a "standard package" is really less desirable for everyone than would be a program which allows each EMT to choose his or her own shift (and therefore lifestyle) based on a combination of factors, one of which is money.

Conclusions

The Public Utility Model was designed to fit the EMS industry — an industry with economic characteristics all its own. "Peak loading" problems exist that are very much like those found in the electric power industry. There are powerful considerations of "economies of scale" affecting both efficiency and overall reliability. There is the problem of the customer/provider transaction itself. Hardly anyone "quality/price shops" when they need emergency assistance.

We are dealing with an industry that should probably not be financed on a fee-for-service basis at all, but which, being an integral component of the larger health care industry, must depend for its long-run financial stability partly upon its ability to tap its fair share of America's fee-for-service health care dollars.

EMS is an industry, unlike most others, in which consumer satisfaction cannot be considered a reliable measure of service quality. It is an industry which many people mistakenly believe should be split into two production components — emergency versus nonemergency care. Such a "split" is neither financially nor clinically desirable, but some of our biggest service systems today are based upon such a division.

The Public Utility Model is complex because the industry it was designed for is complex. Like any other theoretical framework, the Public Utility Model will probably never be installed without adaptation and modification, and we think that is proper. The Model serves as a distinct alternative to "socialized emergency medicine," as well as to laissez-faire, hit-or-miss service systems. And even if the Public Utility Model isn't right for your community, its visibility and accountability are likely to influence your operations, as new standards of production efficiency become more visible throughout the industry. □