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INTERFACE

Public Utility Model Revisited

Part 2 — 10 Essential Features

Last month we discussed the origins of the public utility model and the model's underlying economic logic. We noted that four major cities have installed essentially "pure" public utility model systems (the Ft. Wayne system began as a hybrid but evolved into a "pure" form of the model), that several more communities are considering the model, and that most of the industry has felt the influence of public utility model concepts.

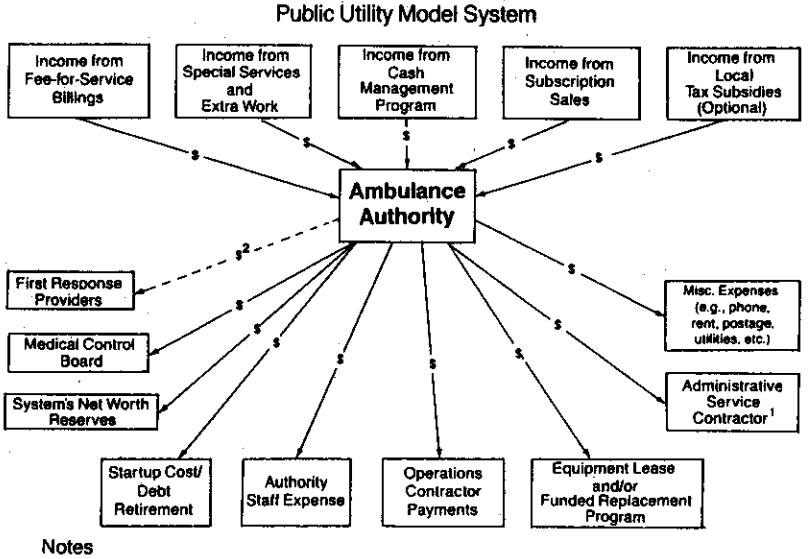
We had intended to include in this month's *Interface* both a description of the "generic" public utility model structure and an examination of the track record of the oldest public utility model system — the Tulsa, Oklahoma prehospital care system. However, reader inquiries suggest the need for a somewhat detailed treatment of the system structure. Therefore, we'll focus upon structure this month, and cover Tulsa's seven-year track record in a third segment next month.

The Pure Form

People are often confused as to which features must be in place to make a given prehospital care system a true public utility model system. Such confusion is understandable since the application of the model in a real-world setting always involves special adaptations unique to each setting. Even so, *every* public utility model system, if it truly *is* a public utility model system, somehow incorporates the following essential features:

- *One hundred percent paramedic.* Every ambulance operating within the system, both emergency and nonemergency, must be equipped and staffed to operate at the paramedic level. That is, in the geographic area served by the system, BLS units are simply not allowed to pick up patients. (Some public utility model systems staff each unit with two paramedics, while others allow one of the crew members to be certified at the BLS level.)
- *Fully centralized dispatch.* Every request for ambulance service originating from within the system's primary service area, both emergency and nonemergency, must be handled by a single control center, and the movements of every ambulance operating within the system must be governed exclusively by that control center. Control center personnel must be trained to approximately the paramedic level, and must be expert in system status management and clinically oriented telephone protocols. All control center personnel must be employees of the contracted private provider (see item 6, below), and that provider must be contractually responsible for control center performance.
- *No call screening; no transport refusals.* The control center must dispatch a paramedic unit to each request for ambulance service, whether emergency or nonemergency, and there must be no refusal to transport patients who wish to be transported, regardless of ability to pay. (A public utility model system cannot tell the patient to call another provider because there are no other providers in a public utility model system.)
- *No on-scene collections allowed.* Except for long-distance transport requests (e.g., over 50 loaded miles), ambulance crews are neither required nor allowed to engage in bill collecting activities. All billings and collections are done *after the fact* by mail or office walk-ins.
- *Medical control by medical community.* In each public utility model system, some type of legal structure is created which allows local physicians to establish, monitor, and legally enforce all quality control elements including equipment standards, in-service training requirements, medical protocols, dispatch protocols, personnel certification and re-certification requirements, medical audits, qualifications of physicians who wish to participate in on-line medical control, and every other aspect of system performance which might affect

Figure 1: Generic Business Structure and Cash Flow



Notes

1. Administrative services may be performed by contract or in house, at Ambulance Authority's option.

2. Authority may reimburse first responder providers, depending upon approval of such fees by governmental entity.

patient care. The requirements set down by physicians are not advisory – they are real and carry the force of law. (Usually a not-for-profit physician's foundation is established by local emergency physicians, recognized in local ordinance, and contracted by local government to provide "regulatory fact-finding professional services," paid for by way of small per-run franchise fees assessed on each patient transport.)

- *Single, competitively selected private operator.* The system must be served by one private (i.e., non-governmental) operations contractor selected by means of a fair and objective competitive bid process. The operations contract must be a performance contract – not a level-of-effort contract – and the contractor must retain the right to achieve the required clinical and response-time performances using that contractor's own production methods (e.g., system status management techniques, vehicle deployment/redeployment techniques, staffing patterns, etc.). The contract must provide for performance-based compensation and penalties, and compensation provisions must neutralize all conventional fee-for-service incentives to over serve or under serve any neighborhood or individual patient.
- *Performance Security.* The entire system design must be structured to eliminate the chance of service interruption or substantial deterioration from any foreseeable cause. This is accomplished in a number of ways such as maintaining system net worth (including all outstanding accounts receivable) as well as ownership of all essential equipment, licenses, facilities, and communications infrastructure within the public domain, utilizing hybrid performance security and arbitration measures which finance and effect emergency takeover even *before* a court has agreed that a major breach has occurred, and numerous other safeguards.
- *Financial stability.* The system's finances must be structured along the lines of a non tax-supported business. The system must be capable of maintaining performance with or without local tax subsidy. (Two public utility model systems – Tulsa and Little Rock – currently operate without local tax support, while two others – Kansas City and Ft. Wayne – currently derive about 25 percent of operating costs from steadily declining local tax contributions.) The system must be able to simultaneously serve both subsidizing and non-subsidizing jurisdictions, adjusting respective rate structures to achieve financial fairness, and should be capable of financing, either commercially or with retained earnings, its own equipment replacement, upgrades and expansion needs.
- *Political stability.* While physicians control all clinical aspects of the system, the business and public relations affairs of the system are controlled by a specially organized not-for-profit entity whose directors are unpaid public-spirited individuals *selected for their collective expertise in business, finance, law, health care administration and local politics.* Like an airport authority or transportation authority, this "ambulance authority" may have multi-jurisdictional responsibilities. Its job is to manage and oversee all business, financial and political affairs of the system, see to it that financial stability is maintained regardless of subsidy levels, that clinical standards established by the physicians are achieved and maintained, that a qualified operations contractor is fairly selected and compensated, and that the operations contractor is insulated from both political interference and concern over rates or collections, leaving the operations contractor free (and paid) to concentrate entirely upon clinical and response-time performance, and production efficiency.
- *New features.* Since the public utility model was originally conceived (nearly a decade ago), two new essential features have been added. First, because of what we now know about the value of a sound first responder program, especially when combined with a reliable paramedic service system, the presence of a well integrated first responder program, with paramedic-assist training for BLS first responders, is now a requirement. (Some systems collect a "first responder fee" added to the ambulance bill, thereby funding or partially funding the first responder program from collections and third party revenues.) Second, because of the inequities in many third party reimbursement programs (See *Interface* in October and November 1984), all public utility model systems now offer subscription programs which allow residents to prepay on a fixed price basis all uninsured portions of bills owed for medically necessary emergency and nonemergency service.

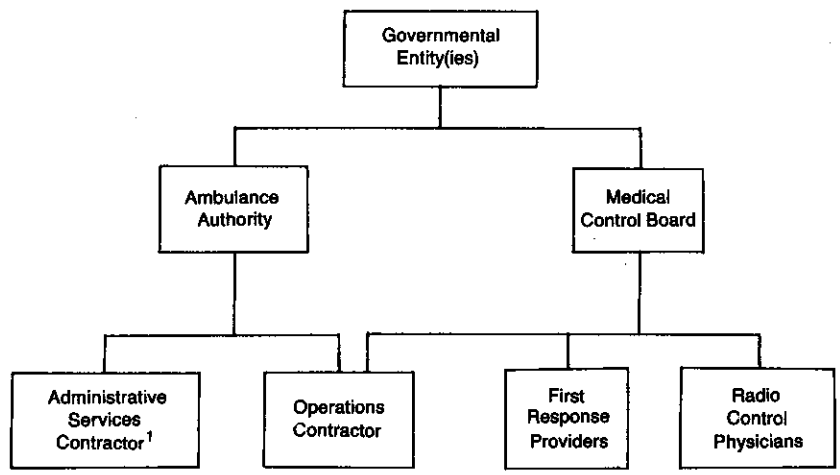
The purposes behind the public utility model were listed in last month's *Interface* column. The above list of 10 essential features shows, in very general terms, the way a public utility model system goes about achieving those purposes. Of course, there is more – lots more. But the basics of a public utility model system are as described above, and all four systems installed to date possess those listed features, though each system has its own distinct legal and organizational structures tailored to the local situation.

How Complex Is It?

Think about it. To install the new system, something must be done about the old system. In two cases, existing companies were bought out, and the negotiation process, including the drafting of related contracts, took months

Figure 2: Generic Organizational Structure

Public Utility Model System



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and stacks of paper. Multiple lawsuits are often filed, preceded by an in-depth analysis of the complex legal issues at hand, and succeeded by briefs, depositions, and more legal research.

Several ordinances must be developed, both to create and install the new system, and to provide for orderly transition from the old system. Usually, one or more new legal entities must be created – meaning more articles of incorporation, trust indentures, bylaws, etc.

Before equipment can be ordered, specifications must be developed, bids let, and contracts awarded. Usually buildings must be leased or even built – more specifications, contracts, estimates. To commercially finance several million dollars in equipment, facilities, perhaps working capital, lenders are mighty interested in seeing very detailed business projections, legal opinions, and the credentials and track records of those who have developed the financial predictions – more stacks of paper, more months of meetings. I could easily go on.

The public utility model is not a modification or adjustment of the status quo. It is an entirely new structure for organizing the production of a complex and critical service. And, because the model relies upon a contractual network of business relationships and a completely revamped system of financial incentives, there is practically nothing in the status quo that will remain. Almost everything will change from the most major organizational matters (e.g., who do the paramedics work for and where does the money come from?) to the tin-

A Generic Description

At the conceptual level, the organizational and business structures developed with the public utility model are simple and straightforward. The model does, however, incorporate a powerful shift in orientation, as compared with conventional ambulance system structures. But once this shift is understood, the public utility model is actually easier to understand than other system configurations.

Figure 1 shows cash flow in a public utility model system [illegible] organizational structure. When the model is actually applied [illegible] some added complexity is [illegible].

In practice, actual [illegible] of a public utility model [illegible] involving a powerful network of financial incentives, [illegible] entire structure [illegible] oriented, since the [illegible] level of authority over day-to-day operations [illegible] medical control board. Every other aspect of the system merely serves to achieve the clinical standards set by the [illegible] as efficiently as possible.

Organizational [illegible]

• *[illegible].* [illegible] local government which adopt the model represent the customers (taxpayers and the general public), serving their interests by enacting a well-defined set of rules for the operation of the system, empowering the physicians to govern clinical aspects, and establishing a separate mechanism for governing the business affairs of the system. Local government also annually decides next year's [illegible].

• *Medical Control Board.* This board of local physicians (usually emergency medicine specialists) represents the interests of patients. Every decision made by the medical control board is made in the interest of patient care. Emergency physicians are, after all, in a unique position to evaluate the system's daily performance. [illegible] procedures performed in the field are performed under the medical licensure of these physicians, and to some extent, these physicians share medical liability for work performed in the field. Thus, all aspects of the system which may affect patient care are governed by the medical control board. This board's work is funded at a modest level, usually by a type of franchise fee arrangement.

• *Ambulance Authority.* The "authority" is typically a specially created governmental body authorized to provide multi-jurisdictional services. Its directors or trustees are [illegible] persons whose collective expertise in business, law, finance, health care administration and medicine combine to provide non-political, expert, impartial and fully informed [illegible] management of the system.

The authority is prohibited from operating [illegible] ambulance service directly, and must contract for the services of a qualified operations contractor. (An agency will [illegible] objectively monitor the performance of a contractor than it would its own performance. Even see a fire department "fire" itself?)

The ambulance authority is *not* a regulating agency – rather it is a *regulated* agency. That is, the medical control board sets, monitors and continuously upgrades standards and it is simply the job of the authority to establish and operate a compliant system by [illegible] contractors and maintaining financial stability.

Finally, it is the authority's job to insulate the operations contractor from political and bureaucratic interference, unfair criticism and economic loss from causes beyond the contractor's reasonable control. Rates, collections and local politics are *not* the contractor's concern.

• *Operations Contractor.* It is the responsibility of the operations contractor to manage the actual delivery of ambulance services. Clinical and response-time performance must be consistent with standards established by the medical control board. The contractor need not become involved in the local politics of ambulance services, subsidies, rates or collections practices. The model deliberately allows the operations contractor to focus completely upon field operations. Everything which can affect the contractor's ability to perform is under the control of the contractor – no excuses.

Except for "extra work" and long-distance transfer service, the operations contractor is not paid on a fee-for-service basis. Instead, the contractor is paid a fixed monthly fee as bid. The contractor is, of course, compensated additionally if increased standards during the term of the contract cause an increase in the contractor's operating costs. System upgrades are made whenever ordered by the medical control board without waiting for an adjustment in next year's budget.

• *First Response Providers.* The model recognizes the extreme importance to the critical patient of a reliable first responder program. In most cases, first responder programs are furnished by local fire departments or volunteer rescue organizations. These non-transporting first responders are trained at approximately the BLS level, plus about 20 hours of additional "paramedic-assist" training.

Equipment and procedures used by first responders, as well as first responder dispatch protocols, are governed by the medical control board, ensuring full continuity of care and smooth [illegible]. In some systems, a "first responder [illegible] charge" is added to the [illegible] ment, and the revenue [illegible] to cover part or all of [illegible] program costs.

• *Radio Control Physicians.* These are emergency department [illegible] who wish to direct patient care in the field by radio contact with [illegible]. The model recognizes that effective physician direction of field procedures requires that the physician is familiar with the system, its personnel, [illegible] conventions, unique medical [illegible] on-board equipment and [illegible] standing orders, patient [illegible] techniques, etc.

The medical control [illegible] periodic orientation [illegible] physicians, and issues [illegible] to ensure that the physician [illegible] is thoroughly knowledgeable [illegible] and its procedures and [illegible]

iest but equally important details of day-to-day operations (e.g. will shifts be bid by seniority and who pays for the broken handi-talkie?) And, because both lives and big bucks are at risk with no taxpayer/sugar daddy to bail out a mistake, nearly all of these details, large and small, must be defined and clearly dealt with in some legal document or "specification" which will eventually be attached to a legal document.

What this means is that a single copy of every document that goes into the design and implementation of a public utility model system will approximately fill the back end of your compact pickup truck and squash its little tires flat. But then so would the comparable documentation of specifications, materials, engineering data, bid documents, cost estimates, contracts, subcontracts, progress inspection reports, permits and other written materials associated with the construction of a new city hall, subway system, or other major construction project.

Even though constructing a living system of production is far more complicated than constructing a building or a machine, most of us recoil from such heavy documentation and yearn for the apparent simplicity of a socialized ambulance system or a laissez-faire private system.

A public utility model system is not really any more complicated than the alternatives, but its extreme accountability, medical and financial, forces complexity to be recognized, defined and documented to a degree far beyond our young industry's usual habits. Is it worth it? The answer may depend upon where you fit within the new system. More likely, your opinion will be determined by your vested interest in the system being replaced.

When the New Wears Off

Like new cars, new boats, new lovers and new shoes, most prehospital care systems have a nice look and feel about them when they are first put together. The real test of quality comes only with time. At worst, service actually deteriorates while costs continue to rise. (Several of the flashiest federally supported projects have demonstrated this feature.) Then there are systems which, as one fire chief recently told me, were 1973 Cadillacs when they were installed, and are still 1973 Cadillacs in 1985. They don't actually deteriorate, but neither do they evolve rapidly enough to maintain state-of-the-art credentials. (California is infested with such systems, still living on the legacy of Johnnie and Roy.)

Then there are a few systems that are like the old Jaguar I used to own. I loved that car, and I hated it. It was capable of combining superb performance with real luxury, but maintaining that performance meant installing a high capacity dollar injection system. (The Austin, Texas system – see January 1985 *jems* – reminds me of my old Jaguar.)

The real challenge is to build a system that is initially state of the art and efficient, but which is so equipped with built-in self-correcting mechanisms and cost containment incentives that it will remain state of the art over time, without losing efficiency. The application of the public utility model in Tulsa is now in its seventh operation year. Is it living up to the promise of long-range performance? Next month, we'll closely examine the clinical, operational, financial and political track record of one of America's most controversial EMS systems. □