

Propositions About the Make Versus Buy Decision in the Medical Program

For the past thirty years or so, the Department of Defense has provided a health care benefit to eligible beneficiaries—active-duty members, their dependents, retirees, and their dependents and survivors--through a mixture of care provided in DoD facilities and private sector facilities.

Like most other employers, DoD has found the cost of its health care programs increasing over time. In 1972, the health program accounted for about 3 percent of the defense budget; by 2002, that figure had risen to about 9 percent.

Based on recent studies, DoD facilities enjoy a cost advantage in the production of health care. The question then, becomes: How can the Department of Defense best exploit this cost advantage in a situation in which it will be making some health care and buying other care? In other words, how can the Department set up “make/buy” decisions to exploit its advantages? The principles for making these decisions are well known, but there are facts particular to the military medical program that affect the application of the principles.

Proposition 1: MTF capacity exceeds the wartime mission. The justification for *maintaining* a medical system rests on the military requirement for medical assets. In periods of war or mobilization, many of the personnel assigned to military treatment facilities (MTFs) in peacetime are sent abroad to provide care to deployed forces and to treat casualties. The stateside hospitals are available to provide more sophisticated care to casualties transported to them, and they serve as training grounds in peacetime for medical skills required in wartime. How *large* a medical establishment DoD needs to maintain is a different question, however, and one that has been subject to much debate. During the 1950s and 1960s, medical wartime requirements were based on projected usage rates in a major European conflict. With the end of the Cold War, less demanding scenarios were introduced. Both the 1994 Congressionally-mandated “733 Study” and an internally commissioned 1998 update to that study found that the medical capacity of the Department substantially exceeds the wartime requirement.

Proposition 2: The benefit mission exceeds the wartime mission. The other part of the medical program is the medical benefit, part of the terms and conditions of employment offered to active-duty members, retirees, and their dependents. About 8.2 million people have a claim to health care provided by the Defense Department either within its facilities or obtained through purchased care programs.

During the 1950s, when wartime medical requirements were large and there were relatively few retirees, DoD could handle the entire medical mission with the assets that it needed for wartime (with small reimbursement programs for those beneficiaries living in areas not served by DoD facilities). The situation began to change, however, during the Vietnam era, when a major reimbursement program (CHAMPUS) was established. This program was needed in part because the larger military force maintained after the Korean

War was beginning to retire in large number, and in part because casualties were pushing retirees and dependents out of DoD facilities.

Proposition 3: Beneficiaries are increasingly retirees, their dependents, and survivors. There has been a major change in the number and composition of those who are eligible for care under DoD programs. Beneficiaries are increasingly not active-duty or their dependents, but rather are more likely to be retirees or their survivors and dependents. Of the more than 8 million beneficiaries eligible to receive care in 2002, only 19 percent are active-duty and another 26 percent were active-duty dependents. Retirees and their beneficiaries make up the remaining 55 percent of beneficiaries. Importantly, 13 percent of DoD beneficiaries are now over age 65. This age group, which contains far more intensive users of medical services than younger groups, is the only portion of the population that is growing. Unlike almost all other medical programs, not all DoD beneficiaries are users of the military medical system. Although estimates of the number of users can be made, there is no way to tell how many people are full-time, part-time or non-users of the system. The Assistant Secretary of Defense for Health Affairs (ASD(HA)) estimates that there are about 5.8 million full-time equivalent users.

Proposition 4: Adjusted for complexity, the cost of care in MTFs is less than the cost of purchased care. Given that DoD will maintain a medical establishment, and considering the relative size of the benefit and military missions, DoD will likely buy some of its care and make some of its care in military facilities.

Every economist is brought up to believe that public sector enterprises cannot possibly have a legitimate cost advantage over their private sector counterparts. Two major studies, however, have found that DoD facilities do indeed enjoy such advantages. One of the studies, was a Congressionally-mandated analysis conducted by PA&E between 1992 and 1994 with extensive support from the Institute for Defense Analysis (IDA) and the RAND Corporation. That assessment, called the “733 Study” (for the section of the 1992-93 National Defense Authorization Act that mandated the analysis) found that care in DoD facilities cost about 25 percent less than private sector care.

A more recent study, conducted by the Center for Naval Analysis (CNA) in 2001, confirmed the results of the 733 analysis. The CNA study found MTF costs to be roughly one-third lower than the costs of purchased care in FY 99. The CNA study also found that care produced in a few DoD hospitals are more expensive than purchased care, and that DoD community hospitals are cheaper relative to the purchased care than either DoD medical centers (which treat a more complex case mix) or DoD clinics. Both studies made adjustments to the data to permit “apples to apples” comparisons with the private sector.

Some of the cost advantage enjoyed by military facilities follows from factors that an economist would exclude—for example, liability premiums for malpractice, tax advantages, and not having to provide indigent care to the same extent as private facilities do. Other elements of the cost differential—lower salaries for physicians, a different provider mix, fewer hotel amenities, perhaps a slower spread of capital-intensive

technology—are real. The elements of the cost advantage are difficult to tease apart and may not be exhaustive—it is not possible to be precise about the degree to which the advantage is due to accounting or real sources.

Proposition 5: Under current pricing and financing arrangements, it is not easy to exploit the MTFs’ cost advantage. The 733 study offered a strong caveat to the finding that DoD facilities are cheaper. Most insurance programs manage the demand for care through enrollment premiums, deductibles, and copayment. Care in DoD facilities, however, is provided free to the recipients. This has two effects. First, the bulk of the production cost advantage accrues to the beneficiary, not to DoD. Second, increases in DoD production attract individuals who are not using DoD’s purchased care programs as well as those who are. Large scale attempts to recapture work in the MTFs will *increase* costs, despite the cost advantage these facilities enjoy, because many of the “recaptured” beneficiaries would not otherwise have used the DoD system. This led the 733 Study to conclude that DoD should size its medical establishment to the wartime requirement (i.e., downsize DoD’s military medical system) unless the “demand effect” could be brought under control.

Mandatory enrollment in DoD programs would simplify the problem to a degree because individuals would have to indicate in advance whether they were going to use DoD programs and, if so, which programs/providers they intended to use. This would decrease the speed with which nonusers would be attracted to the MTFs if MTF capacity were expanded. More generally, without mandatory enrollment, the purchased care/MTF split becomes very difficult to manage effectively.

Proposition 6: Financial incentives discourage efficient behavior on the part of the MTFs. The MTFs are funded separately from the Managed Care Support Contracts (MCSCs) that provide purchased care to beneficiaries. The MTFs are funded through the military medical departments under a system in which historical budgets play an important role. The MCSCs are funded through the TRICARE Management Activity (TMA) a field activity that reports to the ASD(HA). The separation of funding streams means that individual MTFs do not feel strongly the effects that their actions may have on contract costs. If a change in MTF obstetrics/gynecological care at one MTF, for example, causes more babies to be born at civilian hospitals, the local MTF commander does not feel the contract cost increase directly. At best, the higher contract costs may mean that the contracts absorb some funding that otherwise might have been available to the military medical departments to disburse among their MTFs.

There is little incentive, however, for an MTF commander to seek opportunities to reduce contractor costs—few of the resultant savings come back to the individual MTF. That some MTF commanders do pursue such opportunities is a tribute to the willingness of military managers to manage against incentives.

Proposition 7. At least in part because of the perverse financial incentives, patients and costs have been pushed out of the MTFs onto the (more expensive) Managed Care Support Contracts. Between 1994 and 1999, MTF productivity (as

measured by outpatient visits per provider in outpatient clinics) declined by about 23 percent. Many argue that this decline reflected a general reduction in support to providers, due to the military downsizing. The ratio between support personnel and providers, however, remained virtually constant over the period.

PA&E examined the possibility that there might be a correlation between the change in the proportion of total care provided in-house (MTF “market share,” where workload is measured in outpatient visits and inpatient admissions) and the size of contract cost increases by region. In general, regions where MTF market share increased, or declined by less than the average rate, had lower bid-price adjustments than regions where the MTF market shares had suffered steep declines.

Proposition 8. The mechanism (Managed Care Support Contracts) by which DoD buys its medical care is deeply flawed. The Managed Care Support Contracts are unique among health care contracts, and among defense contracts, in that they are designed to “wrap around” the extensive in-house military medical system. Thus, they are designed to “buy” what the in-house system cannot “make,” rather than provide a fixed amount of care or deliver care to a fixed population. In addition, the statute mandating TRICARE’s creation stated that the contracts must involve risk sharing, so that the contractor bears some (but by no means all) financial risk for care provided outside DoD’s own facilities. The Department has found the cost of these contracts difficult to estimate and has often been surprised by additional costs that occur in the execution year.

In addition to the wraparound nature of the contracts and risk sharing by the contractors, at least two other sources have contributed to contract problems:

- The extremely complex adjustment mechanisms built into the contracts in an attempt to hold contractors harmless for factors not within their control.
- Failure of the government to implement anticipated levels of resource sharing (resource sharing agreements allow contractors to reduce their costs by supplementing the resources available at local MTFs in order to increase the MTFs’ output.)

The TRICARE contracts establish both an expected bid price for each year of a contract’s execution and a process for adjusting that price if certain factors changed as the contract executes. The wraparound contracts meant that each regional contractor’s workload was hard to predict, so an extremely complex adjustment formula was inserted into the contracts. This formula adjusted the price paid to the contractor for a number of factors, including: changes in DoD workload; changes in medical prices; population shifts; and other factors outside the contractor’s control. The application of this formula gave rise to periodic Bid Price Adjustments (BPAs) in the contracts. Thus, if a particular contractor began to see more patients than had been originally estimated, the firm would be “made whole” by the government for those additional costs when the next BPA was calculated. If, in contrast, a contractor saw fewer patients than expected, the BPA would transfer

money from the contractor to the government. At the time, the early 1990s, the government believed that the net affect of the BPAs would be relatively small. Contrary to that expectation, the bid price adjustment mechanism has proved to be unwieldy and time consuming.

There are two other mechanisms for adjusting the terms of TRICARE contracts. First, as benefits are modified, or if contractors are required to perform other actions to comply with regulatory changes and changes in reporting requirements, the contracts are modified through a series of change orders and contract modifications. The price for each of these change orders and modifications is negotiated with each of the seven contractors. There have been over 500 such modifications in the contracts to date.

Second, if a contractor's costs are rising for reasons not addressed above, the contractor can make what is called a Request for Equitable Adjustment (REA). In filing an REA, a contractor argues that some government action or variable in the contractor's environment has changed—that is, the terms of the contract have been violated. If not successfully resolved by negotiation between the contractor and TMA, REAs can be taken to the Board of Contract Appeals and, ultimately, to the courts for resolution. Contractors have made extensive use of this mechanism.

Proposition 9: The new “TRICARE for Life” benefit for Medicare-eligible beneficiaries further complicates the make-versus-buy decision by creating a set of beneficiaries with different financial implications for the Department. Prior to FY 2002, Medicare-eligible beneficiaries were entitled to care in DoD facilities only on a space-available basis. These individuals were not eligible to receive care under the TRICARE contracts (except in a few exceptional cases.) Medicare was their primary benefit. If they received care in MTFs, DoD bore all of the costs of the care.

The “TRICARE for Life” benefit effectively replaces private sector Medicare supplemental insurance with a broader government benefit, reducing the cost of medical care to the beneficiary. It makes DoD liable for the share of the costs that beneficiaries would pay under Medicare (on average about 20 percent) for care received in the private sector. DoD remains liable for the full cost of care that is provided in its facilities. Individuals can wash back and forth with a seamless benefit between the private sector and DoD, though DoD's incentives remain strongly in favor of private-sector care for this group. Moreover, because this care is paid for through an accrual mechanism and complex reimbursement rules, unintended financial incentives may have been created that will take some time to understand.

Concluding Questions: Given the propositions stated above, the problem facing the Department is complex. How much care should DoD make in-house? How can the Department best manage its in-house facilities and arrange for purchased care? How can it design a system that incentivizes appropriate decision makers to make individual make versus buy decisions that optimize results for the Department as a whole?

It was discontent with the results of then-existing arrangements that led to the creation of the Defense Health Program as a centralized entity in the early 1990s. In recent years, there has been considerable discussion of further modification of the organization of this program. This has led to proposals to create a Defense Health Agency or a Joint Command on the one hand and to proposals that management responsibility for the program devolve back to the military departments on the other. Organizational change, however, offers little prospect for improvement without addressing problems of incentives and program oversight.

Addendum: Sources

The size of the medical establishment (in particular the requirement for physicians) is addressed in:

The Economics of Sizing the Military Medical Establishment: Executive Report of the Comprehensive Study of the Military Medical Care System. Department of Defense, Office of Program Analysis and Evaluation, April 1994.

Section 733 Update: Report of the Working Group on Sustainment and Training. Department of Defense, Office of Program Analysis and Evaluation, April 1999.

Descriptions of the beneficiary population are available from the Office of the Assistant Secretary of Defense for Health Affairs.

The cost of providing care in DoD facilities relative to private sector providers is discussed in the *Economics of Sizing the Military Medical Establishment*, cited above, and in:

Matthew S. Goldberg, et al. *Cost Analysis of the Military Medical Care System: Final Report* (Institute of Defense Analysis, Paper P-2990), September 1994; and

Matthew S. Goldberg, Ted Jaditz, and Vicki Johnson. *Efficiency Analysis of Military Medical Treatment Facilities* (Center for Naval Analyses Report number CAB D0004561.A2), October 2001

Discussions of the financial incentives that affect MTF behavior and of the contracts may be found in:

Carla E. Tighe, Patricia Bronson, and Paul F. Dickens III, “Military Health Care Costs and Productivity” (Paper presented at the Western Economic Association Meetings), San Francisco, July 2001.

David McNicol, “PA&E issues for the DHP” (Briefing presented at the PA&E/CNA Conference on Defense Health Program Financial Flows), Alexandria, Virginia, May 2001 (CD disc CME D0004308.A2)

Bryan Jack and Carla Tighe “Health Program Financial Flows and the DoD Resource Process” (Briefing presented at the PA&E/CNA Conference on Defense Health Program Financial Flows), Alexandria, Virginia, May 2001 (CD disc CME D0004308.A2)