

Appendix C.—CT-Related Policies of the Department of Defense and the Veterans Administration

The Department of Defense

The Department of Defense (DOD) Health Council, including the Surgeons General of the Army, Navy, and Air Force, and the Assistant Secretary of Defense for Health Affairs, reviews all requests for capital expenditures exceeding \$100,000. Acquisition of computed tomography (CT) scanners proceeds in the same way for each of the three armed services. The Commanding Officer of a hospital will make the initial request for a scanner to the Surgeon General's Office. Justification of the purchase request will state the need for the scanner in terms of expected patient load, the beneficiary population, and geographic access. Local health systems agencies (HSAs) are consulted, since military requests are to be coordinated with those of local civilian facilities. The Surgeon General will then bring the request and justification before the Health Council for authorization. Funding of authorized expenditures is a separate process, and money may not be appropriated for some time following authorization of purchase. The time from initial request to installation of a new scanner may be as long as 2 years.

At last report, a decision had been made to purchase six scanners, two for each of the armed services. As of May 1980, the Army has two operational scanners, and the Navy has four; the Air Force has two, and a third one is being installed. Since July 1, 1977, when only one scanner was operational, seven more have been added for a total of eight scanners for the entire DOD. All are total body scanners and are located in large medical and teaching facilities. Others have been approved and funded, but are not yet installed. Military hospitals and clinics without scanners continue to use CT scanning facilities of civilian institutions and pay for such scans out of operating budgets.

DOD is currently not supporting any major research related to CT scanning, although it does fund health research. The Air Force, however, is a partial supporter of the dynamic spatial reconstructor imaging system being developed at the Mayo Clinic. Its interest in that project does not lie with the diagnostic capabilities of the technology, but with the generic problem of high-speed processing of information for imaging that is inherent in it.

The Veterans Administration

There has been a major shift in Veterans Administration (VA) policy toward the purchase of CT

scanners for the VA system of hospitals. The predominant means of obtaining scans for VA patients has been for VA hospitals without scanners to contract with local civilian institutions and to pay for such scans out of operating budgets. As of August 1978, a total of 14 scanners were either operational, being installed, or were ordered for the 171 VA hospitals. Currently, there are 17 operational scanners in the VA system (5 head and 12 body), another 6 total body scanners have been purchased, and there are 2 mobile scanners—for a total of 25 scanners in the VA system. As noted in chapter 2, a number of large VA hospitals do not have scanners.

The shift towards preference for purchasing CT scanners rather than contracting for services is justified in a 1978 VA report by the Special Central Office Advisory Group for Computerized Tomography Units (179). The study compared the cost of obtaining scans for its patients by these two methods and found that the cost of performing a CT examination on VA-owned and operated scanners was only about 60 percent of the cost of the same exam obtained under contract from a civilian institution. The convincing cost differential suggests that the VA cannot afford not to buy its own scanners. This evidence, in combination with VA's special characteristics of a fixed operating budget, and the legislative mandate it has to serve veterans, has led the VA to adopt a policy of purchasing CT equipment whenever possible.

The report suggests optimal guidelines for the purchase of CT scanners under this new policy. These guidelines state that at least 500 exams per year would be required to cost justify purchase of a dedicated head scanner costing \$150,000 or less; 1,500 exams per year would be necessary to justify a total body scanner costing \$450,000 or less; and more than 1,500 exams per year would be required to justify one costing more than \$450,000. At least 2,500 exams per year would be necessary to cost justify purchase of a second CT unit in a facility. Under no circumstances would purchase of a CT scanner be considered if a VA or other federally owned scanner is within 30 minutes from the facility in question.

It should be emphasized that these guidelines are only optimal. While more generous than the proposed National Health Planning Guidelines of 2,500 exams per year for both a first and a second scanner in a given facility, and the VA is legally exempt from that standard, they are attempting to conform as closely as possible. In practice, the VA is using a

guideline of about 2,000 exams per year as a threshold for considering a request for purchase of CT equipment. It is also continuing its policy of coordinating purchase decisions with existing local CT capacities by seeking local HSA certification of need, although this review is not required by law.

Decisionmaking on purchase and placement of CT scanners is done centrally, although it is responsive to local level requests. The VA Advisory Group on CT Units, including the directors of Medicine, Surgery, Neurosurgery, and Neurology, have developed a list of VA hospitals that are priority candidates for placement of additional CT scanners in the VA system. At this time, purchase of the total body scanners have been given precedence so that only the biggest, most well-equipped and staffed, and busiest hospitals are being considered for placement of these scanners. Being at the top of this list, however, does not ensure that the hospital will receive a scanner. Local available CT capacity may mediate this apparent necessity. Acting within the constraints of a fixed annual budget, the decisions of purchase and placement of CT units for the system must be based on the criterion of maximizing total VA scanning capacity, by whichever means it may be obtained.

Purchase of scanners by the VA is itself a unique process. Once a decision has been made to buy a unit for a particular facility, or facilities, the VA requests bids from manufacturers quoting prices of models that meet the particular specifications of the scanners required at each site. The VA accepts the lowest bid made by manufacturer for a machine that meets the necessary specifications. The large purchasing power of the VA allows them to purchase scanners in this way, typically resulting in a purchase price between \$100,000 and \$200,000 below the usual market price. Even so, the manufacturers bids seem very high in light of the fixed annual budget within which the VA

must operate. Price tags quoted for total body scanners being considered for purchase by the VA at this time were between **\$750,000** and **\$900,000**. This may explain the fact that the Office of Management and Budget disapproved VA's plan to buy nine CT scanners with year-end money in September **1980**. However, information recently collected by the VA from a number of its large hospitals indicates that the costs of buying outside CT scans has increased since the 1978 report. It may cost as much as three times as much to obtain scans in this way.

Several alternatives are open to the VA as possible solutions to their apparent dilemma. One, the purchase of the new cheaper scanners, is not now being considered by the VA. Such scanners are not believed to be adequate to the task required in the large hospitals now being given priority for placement of CT units. Another avenue of approach recently used was the purchase of a refurbished EM I head scanner, originally costing \$450,000, for **\$160,000**. This scanner was purchased for the Palo Alto VA hospital which had been ranked number one on the priorities list for placement of a total body scanner. Because of the nearby scanning capacities of Stanford-University-owned body scanners, however, it had not been approved. A compromise solution was made whereby at least the head scans may be done in-house.

A final alternative that holds promise for the VA is the purchase and operation of mobile scanners. Financially, such units are advantageous for the VA because they can use their own physicians, technicians, attendants, and vehicles. A research project funded by the VA is just getting underway to investigate this possibility. The study will evaluate the sharing of VA-owned equipment with four satellite hospitals in the Boston area. A radiologist at the central VA hospital will read all scans performed by this unit.