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Computed Tomography: Cost Containment Misdirected

During the 1960s and early 1970s, the primary goal of national health policy was to improve access to health care, especially for the poor. The Medicare and Medicaid programs, the Office of Economic Opportunity (OEO and later HEW) neighborhood health centers, the federal support for health professions education, and many other specific federal programs had that as their primary aim. Even the 1974 Health Planning Act—often considered to be primarily a cost containment program—listed primary care services for underserved populations as the first of a number of national priorities.[1]

The thrust of national health policy has changed, as any casual observer of the health care scene knows. The emphasis is now on cost containment, almost to the exclusion of other considerations. For example, the Professional Standards Review Organization (PSRO) program, originally seen as an important quality assurance program, is now expected to restrain the rising costs of health care in the Medicare and Medicaid programs. Policies evolving toward medical technology also focus on cost containment as a goal. Despite reports from the Office of Technology Assessment (OTA) emphasizing the importance of knowing the benefits and risks of medical technology,[2,3] the development of policies toward medical technology seems distorted by the demand for cost containment. Medical technology is seen as one of the major culprits in the rising costs of health care, whether provided and paid for by government or by the private sector.[4]

Access of the poor to medical care did improve with passage of the Medicare and Medicaid programs.[5] However, problems continued. In 1976, about 23 million people, or 11 per cent of the population, were not covered by private or public insurance programs for health care. These individuals, largely the so-called "working poor," must either pay out-of-pocket for care or rely on the remnants of the public medical care system. In addition to these, a large number receive care in public institutions. Several million people use either the military health care system or the Veterans Administration system as their primary source of care.[6] Medicaid eligibles also have problems entering the private system of care, and remain somewhat dependent on the public hospital system for care.

This issue of the Journal contains an article analyzing the medical implications for a neurology service in a public hospital of having a computed tomography (CT or CAT) scanner.[7] Although small, the study is suggestive. The study compares patient diagnosis by the same group of house staff in a private university-affiliated medical center and a public university-affiliated medical center. In the municipal hospital, "diagnostic accuracy of the CT scan was significantly greater and the CT more often functioned to clarify perceived diagnostic problems and later further diagnostic tests and therapy." As noted by the authors, the municipal hospital has sicker patients. Many enter as emergencies. Their data show a number of potentially life-threatening conditions (subdural hematoma, brain abscess, head trauma) that might be very difficult to diagnose without a CT scanner. They recommend that municipal hospitals be given high priority for future allocation of CT scanners.

Assuming that the authors' finding is generalizable to other municipal hospital settings, is this a problem? Unquestionably it is, as indicated by the information on the location of operational CT scanners which OTA has been collecting since 1976. At the end of February 1979, when the latest update was completed, there were 1,254 operational CT scanners in the United States. Of the total of 5,881 short-term general hospitals, 856, or 14.6 per cent, had CT scanners. Most of the community hospitals with CT scanners are voluntary hospitals. Of hospitals with less than 300 beds, 279 have scanners, as do 217 offices and clinics.

There are 1,832 short-term general hospitals supported by state and local governments, and only 139, or 7.6 per cent, had CT scanners. The point becomes even more striking when hospital size is considered. A short-term general hospital with more than 500 beds is almost certain to have an active emergency room, a neurosurgery service, and other specialized and acute care services that virtually require a CT scanner for the provision of high quality care. Yet only 29 of the 43 local government community hospitals with more than 500 beds have scanners. New York City alone has six such hospitals with no CT scanner. These hospitals include Bellevue Hospital (1,758 beds), Harlem Hospital Center (973 beds), Metropolitan Hospital (693 beds), and the City Hospital of Elmhurst (816 beds). Other important public hospitals lacking CT scanners include Cook County Hospital in Chicago (1,384 beds), DC General Hospital in Washington, DC (600 beds), Charity Hospital in New Orleans (1,500 beds), Baltimore City Hospital (524 beds), St. Louis City Hospital (550 beds), Cleveland Metropolitan Hospital (565 beds), and Harris County Hospital in Houston (737 beds). Not only are the patients of these hospitals poor, but they are often members of Black or other disadvantaged groups. The problem, according to several directors of radiology departments in these hospitals, is lack of money in the public treasury. For example, Dr. Norman Chase, Head of Radiology at New York University with general supervision of radiology services at Bellevue Hospital, told me that he believes that high quality of care requires two CT scanners for Bellevue, one in the emergency room and one for inpatients. But in more than six years of trying, he has not been able to acquire a CT scanner for that institution.*

This problem is not confined to hospitals that serve the urban ghetto dwellers. Cost containment has hit at the medical care programs of the U.S. Department of Defense and the Veterans Administration. While these hospitals do not run the large emergency rooms of the urban public hospitals, they do provide care for large populations. Only 14 of 171 hospitals in the Veterans Administration system have CT scanners. There are another 57 VA hospitals spread across the country, each with more than 500 beds, that have no CT scanner. The VA system has been under tight budget controls, and this seems clearly to be affecting quality of care. The Manhattan VA Hospital, which has centralized neurosurgery and radiotherapy services for the VA population of New York City, has no CT scanner, for example. Informants at the Washington, DC VA Hospital report waiting periods of up to two months for VA patients who must have CT scans done at Walter Reed Hospital. Almost every expert would say that it is no longer possible to run specialized services such as neurosurgery and cancer therapy appropriately without ongoing access to CT scanner services. Four military medical centers with more than 500 beds have CT scanners. Two others (Brooke Army Medical Center, Houston, and Naval Regional Medical Center, Portsmouth, VA) have no CT scanners.

The point is that we are allowing goals of cost containment and budget restraint to deteriorate the quality of public medical care services. CT scanners have been made the scapegoat for rising costs, and budget constraints in public institutions have exacerbated an already serious problem of maldistribution of CT scanners. While there is much in medical care that could be cut with little impact on patient outcome,[8] we must be very careful not to cut those services that are of value. And we must continue to try to assure that all members of our society have access to beneficial medical care services.

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*Money is presently budgeted for a CT scanner for Bellevue Hospital.

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