Role of the Urban Academic Medical Center in US Health Care

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MEDICAL SCHOOLS AND AFFILIATED TEACHING hospitals (academic medical centers) in the United States educate and train physicians and other health professionals, perform the majority of National Institutes of Health–sponsored biomedical research, treat the sickest and most debilitated patients, and deliver substantial health care to the poor.1,2 The ability of academic medical centers to perform these vital health care roles is threatened by stagnating National Institutes of Health support for research, declining insurance reimbursement rates, skyrocketing malpractice insurance costs, a crisis in government health care programs, and an expanding population of uninsured and underinsured patients needing care.1

These threats are particularly acute for academic medical centers located in urban areas; many of these centers are surrounded by dense populations of economically marginalized and low-income individuals. Some would argue that these urban medical centers are logically bound to provide all care, including routine primary care, to the surrounding neighborhood. This argument is overly simplistic and may ignore the existence of important community-based health care assets.3 University-based urban academic medical centers, in particular those without affiliated safety-net hospitals, function most effectively and for the greater good when their care is a complement to, and not a substitute for, community health care providers (ie, centers and clinicians).

Academic medical centers excel at delivering highly specialized and complex care. Multiple organ transplants, intricate cardiac surgery, minimally invasive robotic surgery, and cutting-edge clinical trials are examples of highly advanced medical care concentrated in clinical facilities owned by or associated with US medical schools. A reasonable ethical argument is that this type of specialized care should be broadly allocated to all who need it most: not only those in the area immediately surrounding the institution but also those living some distance away who do not have local access to such a facility. This argument logically forces a redefinition of what the term “community” really means. The community served by an urban academic medical center should not be thought of as solely the population geographically surrounding the center but rather must include a much broader population—the local neighborhood, the city, the suburbs, the home state, and the region—incorporating all patients most in need of the complex specialized care academic medical centers provide. This argument does not depend on defining groups by ability to pay or type of insurance; rather, it defines groups by the complexity of disease and the corresponding requirement for a facility dedicated to, and capable of, treating patients with such illnesses.

As the capacity of academic medical centers to deliver complex care continues to evolve, so too does the cost to deliver it. On average, hospitals that are components of academic medical centers spend 60% more per patient day than community hospitals, reflecting the simultaneous training of physicians, the pursuit of clinical research, and the capital-intensive concentration of highly sophisticated medical technology.4 As a consequence of these high costs, academic medical centers are not as efficient as lower-cost health centers in delivering routine care. From a purely economic standpoint, this cost disadvantage argues for an exclusive focus on specialized, complex care so that the resource of such high-intensity centers be available to all those who truly need it.

When the urban academic medical center becomes the major source for the provision of routine care for the immediate neighborhood, the health status of the neighborhood may erode rather than improve as the academic center competes with other neighborhood health care centers. This is a particularly acute problem for organizations such as Federally Qualified Health Centers, which are provided a competitive advantage through governmental financial incentives to provide primary care to inner-city patients. When urban academic medical centers directly compete with Federally Qualified Health Centers, either through lack of appreciation of their existence or through advertising that inadvertently stimulates patients to bypass local health care centers, academic centers can drive these clinical care centers out of business. This in turn detracts from the neigh-

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neighborhood economy and places additional financial stresses on the academic medical center due to its intrinsically high cost structure.

Urban academic medical centers frequently become default providers of routine primary care through emergency departments overcrowded with patients who often could be treated more effectively in neighborhood health care settings, absorb specialized patient care resources, and may displace access for patients more in need of complex care. Even more concerning, these patients often have chronic conditions that could have been more effectively treated long before progression to a more debilitating acute phase. A good example is pediatric asthma, a chronic illness affecting many of the children who fill urban academic center emergency departments and a leading cause of pediatric hospitalization across the country. In a recent study, Cambridge Health Alliance, an acute care hospital system based in Cambridge, Mass, reduced local hospitalization rates for children with asthma by more than half the national average through a combination of education, a novel community-wide communications system, and an effective patient network managed by multiple community health care providers.

Some might contend that urban academic medical centers should allocate their resources exclusively to those patients with the most complex disease, but this too is an oversimplification. These centers train future physicians, and the training exposure must incorporate exposure to patients with the full spectrum of disease. This academic educational mission forms the justification for using a significant fraction of the capacity of such highly expensive facilities for routine care. The key is to achieve a correct balance while not undermining the other venues for health care in the local community—venues better prepared to treat ongoing chronic disease in a fashion that minimizes the cumulative negative impact on the health of our population.

Fogel coined the term “physiological capital” to describe the net health asset of a community, an asset that is eroded when chronic diseases such as asthma are left unattended. Poor management of patients with chronic conditions results in multiple avoidable visits to the emergency department, visits that represent a de facto alarm signaling the erosion of primary care capacity in the urban neighborhood. The responsibility of the urban academic medical center is to assist in protecting the primary care capacity of urban neighborhoods, not to compete with them. On the South Side of Chicago, for example, the immediate neighborhood of more than 600,000 residents has the precious health care asset of 300 primary care (ie, primary care pediatric, internal, and general practice) physicians and more than 2 dozen Federally Qualified Health Clinics. Unfortunately, in similar urban communities, such networks are rapidly eroding and may require direct intervention.

If efforts toward coalition building and urban economic development fail to protect community-based health care assets, the physiological capital of urban neighborhoods will erode, urban academic medical centers will struggle to balance the huge demand for simple care with the high cost of delivering it in such facilities, and patients most in need of complex treatment will be deprived of access to appropriate health care. The nation’s health depends on clearly understanding the unique nature and value of urban academic medical centers and using them wisely.

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