

Flexner at 100: The Pyramid, a New Organizational Metaphor for Academic Medical Centers

The “triangle” of patient care, teaching, and research—the organizational structure of the nation’s academic medical centers that was developed at Johns Hopkins in the late nineteenth century—may need revision. The differences between “then” and “now” are striking. Then, life expectancy was 35 years, most deaths were caused by acute infectious diseases, and the “health system” was simple (usually consisting of 1 patient and 1 doctor) and relatively inexpensive. Now, life expectancy exceeds 80 years; most people face the challenge of multiple, chronic diseases; and the health system is complex, expensive, and often unsafe.

Because academic medical centers train the majority of the nation’s doctors, treat our most seriously ill patients, provide a disproportionate share of the care of poor people in many cities, and play a critical role in the discovery of new treatments for many different diseases, their success is vital to effective health care reform. After 5 years of study at the Johns Hopkins Center for Innovative Medicine, I have concluded that a new organizational structure, captured by the metaphor of the “pyramid,” is better suited to drive that success.

In turbulent seas it is important to have a good compass, and for academic medical centers there is none better than the belief that medicine is a public trust. This belief served to guide the United States out of the healthcare crisis of the late 19th and early 20th centuries. Then, the crisis was caused by the poor scientific training of doctors. As Kenneth Ludmerer describes in his Pulitzer Prize-nominated book, *Time to Heal*, as late as 1880, most doctors were “trained” by enduring a 16-week set of lectures that was then repeated.¹ Most doctors in training had no background in science, performed no work in the laboratory, and had no supervised experience caring for patients. Over the next 40 years, many of the nation’s medical schools were closed, and a number of those remaining adopted the model of rigorous scientific training supplemented by residency training that had been

introduced by Johns Hopkins. The scandalous state of medical school training in the United States and the Hopkins reforms were described vividly and acerbically by Abraham Flexner in his famous 1910 report.² The Flexner report galvanized the nation to demand universal reform of medical education. In time, the Hopkins/Flexner model came to be associated with the triangle.

One of the obligations of being a public trust is to try to ask how we can become better. Given the large investment we receive from the public, through Medicare, Medicaid, the National Institutes of Health, and insurers, we should regularly ask how we can pay back to society a higher dividend on that investment. This self-examination also is important because history teaches the danger of using old solutions for new problems. Although it is understandably attractive to believe that a solution devised to address one problem successfully can be used effectively on a new problem, it can be hazardous to do so. New problems are often different from old problems, just as today’s penicillin-resistant staphylococci do not resemble the exquisitely penicillin-sensitive staphylococci of several decades ago.

Although the 3 classic functions of the academic medical centers, represented by the triangle, remain paramount, I suggest that changed circumstances require us to reexamine our mission and our values. To this end, I propose that academic medical centers reconceptualize themselves as “pyramids,” a change in metaphor that conveys 3 important points:

First, the pinnacle of the pyramid is occupied by the patient, family, and community. Placing them at the pinnacle emphasizes that everything an academic medical center does must benefit the patient and society. So structured, academic medical centers would place renewed emphasis on providing patient-centered care, with attention to costs, appropriateness, and safety of care. Placing the patient at the pinnacle also makes the point that everyone at the academic medical center must strive for excellence in all that we do.

Second, an important reality in a pyramid is that no wall stands alone: Each wall of our mission must be buttressed and fortified by the other 2 walls. As a practical matter, this means that an academic medical center adopting the pyramid model must dedicate itself to promoting collaboration. If the major opportunity of the academic medical center in

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1890 was to train doctors in science to address acute disease, the great opportunity to improve healthcare today is to confront the epidemic of chronic diseases by promoting and facilitating collaboration: between doctors and nurses, doctors and patients, researchers in different disciplines and clinicians, and researchers and educators. The enormous promise of biotechnology, behavior modification, and systems design can be achieved only by teamwork. Academic medical centers that learn to promote, measure, and reward collaboration are likely to assume leadership positions.

Third, the strength of the pyramid comes from its “base”—the culture of the institution. In the ideal pyramid, everyone who works at the academic medical center will be asked to act special: Put the patient first, reach for excellence, and promote collaboration. In return, everyone in the pyramid will be made to feel that he or she is part of something special. People working in the pyramid—with the privilege of caring for patients—should experience joy and a sense of purpose that rival that experienced by Michael Phelps and his teammates when they won the gold medal in the swimming relay race at the 2008 Olympics.

The enduring lesson of the history of medical education in the United States is that medicine is a public trust.¹ Medicine exists not for the benefit of any physician or medical center but for the purpose of providing a public good—healthcare—to individuals, their families, and the community. The organizational metaphor for almost every

academic medical center today is the triangle of patient care, teaching, and research. The triangle was created to address the healthcare crisis that reigned 120 years ago. The current challenges to health require a new organizational metaphor, the pyramid. As we stretch for the pinnacle of the pyramid, putting our patients first and embracing the rich potential of limitless collaborations, we offer the best hope for living out our aspirations and serving the public.

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