The Embattled Academic Health Centre

COMMENTARY

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ABSTRACT

Lozon and Fox have provided a thoughtful analysis of Canadian academic health centres. However, their account is incomplete. Their emphasis on the "shared purposes and goals" of the component groups of academic health centres overlooks the profound tensions and disagreements that have always existed between medical schools and teaching hospitals. In addition, their claim that academic health centres "have endured in more or less the same form throughout their history" ignores the profound growth, changing organization and evolving missions that have characterized these institutions for over a century. Lastly, they do not address the most profound dilemma of all of the academic health centres: that current financial pressures are causing an erosion of their educational work. These three aspects of academic health centres are discussed in this commentary.

THOUGH THIS WRITER views academic health centres from the vantage point of the United States rather than Canada, readers will perhaps be forgiving. From the 19th century, medical education in the two countries has been tightly linked. Indeed, Abraham Flexner entitled his landmark 1910 report for the Carnegie Foundation, *Medical Education in the United States and Canada*. Differences between the two educational systems have always existed, but historically the similarities have outweighed the differences.

Jeffrey C. Lozon and Robert M. Fox have provided a thoughtful analysis of Canadian academic health centres. They

describe their intricate structure and organization, their multiple sources of funding, and their tripartite mission of patient care, education and research. They draw attention to their financial vulnerability in the current health care marketplace as well as to their need to be more accountable for the public funds they receive. Their warning that academic health centres are threatened national treasures is correct and should be taken seriously.

Nevertheless, their account of academic health centres is incomplete. Their emphasis on the "shared purposes and goals" of the component groups of academic health centres overlooks the profound tensions and disagreements that have always existed between medical schools and teaching hospitals. In addition, their claim that academic health centres "have endured in more or less the same form throughout their history" ignores the profound growth, changing organization and evolving missions that have characterized these institutions for over a century. Lastly, the writers do not address the most profound current dilemma of all of the academic health centres: that current financial pressures are causing an erosion in the quality of their educational work. This commentary will discuss these three aspects of academic health centres in more detail.

Medical Schools and Teaching Hospitals

In the late 19th century, teaching hospitals in the modern sense did not exist in the United States. Many medical schools at that time had loose affiliations with local hospitals, but the schools were severely restricted in how they could use those facilities for teaching purposes. Medical schools could not appoint the hospital staff to assure that hospital physicians had academic as well as clinical credentials, and medical faculties were seldom permitted to engage in clinical research. Most important, medical students were not permitted to work in the hospital wards as clinical clerks. The Johns Hopkins Hospital, which opened in 1889 as a mature teaching institution from birth, was the major exception to this generalization (Ludmerer 1985: 152-65).

As the Johns Hopkins Hospital succeeded, attracting international acclaim for its role in medical education and research, other large hospitals began to acknowledge the importance of that model. Many large hospitals – proud institutions that also sought international recognition – began to understand that without educational and investigative elements they would be no different from any other community hospital. By World War I, many hospitals had become agreeable to a more active educational partnership with medical schools, and by the 1920s the modern teaching hospital was finally created (Ludmerer 1985: 219-33).

From the beginning, the relationship between medical schools and teaching hospitals was one of co-dependency. Medical schools, ever on the alert for clinical facilities, understood that access to the wards of hospitals was essential for teaching and research. Teaching hospitals, in turn, understood that their preeminence in 20th-century medical practice was a consequence of their participation in medical education (Ludmerer 1999: 103–13).

However, a complete union of hospitals and medical schools never occurred.

Strong tensions between the two persisted. Medical schools, arising from university traditions, remained oriented primarily towards education and research, not the provision of patient care. Teaching hospitals, which had arisen from a tradition of charity and patient care, could never forget that their primary role was to provide clinical services. Medical faculties tended to have a cavalier attitude towards costs and expenses that irritated many hospital administrators. In turn, teaching hospitals were under pressure to deliver more and more clinical services, which was distracting to education and research and frustrating to medical faculties (Ludmerer 1999: 103–13).

These tensions were apparent even in the relationship between the two most successful and important teaching institutions in 20th-century America: Harvard Medical School and the Massachusetts General Hospital. Authorities of Harvard Medical School frequently spoke of "the Massachusetts General Problem," while trustees of Massachusetts General referred to a temporary "treaty" they had negotiated with the medical school. Some of these tensions reflected administrative disputes, such as how income and expenses should be allocated or what the proper reporting structure should be. Most of the conflict, however, arose from the fact that the two institutions had separate origins and missions. The medical school, with its university roots, was primarily future-directed; its chief task was to educate doctors and develop sounder methods of practice for tomorrow. The hospital, reflecting its service traditions, defined its main responsibility as caring for patients in the immediate present. As one Harvard medical dean put it, "The primary objective of a hospital is to care for sick people, that of a medical school to produce good doctors" (Ludmerer 1999: 170).

The Evolving Academic Health Centre

By definition, what made an academic health centre "academic" was the presence of a medical school. From the beginning, the modern American medical school had a tripartite mission: education, research and patient care. However, the relative importance of these activities varied with time. From World War I to World War II, the educational mission was paramount. Teaching was the end in itself, and patient care was pursued only insofar as it was needed to facilitate teaching. Faculties prided themselves on providing an educational environment that focused on the needs of learners.

After World War II, research replaced teaching as the dominant activity of most medical faculties in the United States. This resulted primarily from the expansion of the National Institutes of Health. By 1965, federal grants and contracts typically accounted for 60% or more of the budgets of research-intensive medical schools. However, all medical schools shared in the wealth, and at virtually every school the research enterprise grew to a size that before the war would have been considered unimaginable.

After the passage of Medicare and Medicaid in 1965, patient care became the dominant activity of U.S. medical schools. The amount of faculty practice soared, as millions of "ward" (charity) patients became paying patients overnight. Within 15 years, the size of the clinical enterprise eclipsed that of the

academic enterprise at virtually every school, and faculties typically generated 50% or more of their income from private practice. Clinical revenue allowed an extraordinary expansion of faculty sizes and salaries, particularly in the clinical departments.

Throughout the 20th century, both medical schools and teaching hospitals experienced enormous growth. In 1910, a leading medical school might have had a budget of $100,000; in 1940, $1 million; in 1965, $20 million; and in 2000, $400 million or more. In 1945, there were 3,500 full-time faculty members in U.S. medical schools; by 1990, about 75,000. Teaching hospitals experienced similar growth. For example, in 1910 a prominent teaching hospital might have had a budget of $200,000; in 1940, $2 million; in 1965, $40 million; and in 2000, $800 million or more.

Not surprisingly, by century's end the management of academic health centres had become exceedingly demanding. The fiscal and administrative issues pertaining to their large budgets, sizeable faculties and staffs, and broad scope of educational, investigative and patient care activities were immense. Resources, though substantial, came from multiple sources that were less stable and predictable than traditional sources of revenue to the university. This circumstance required that planning be sophisticated and exact. Academic health centres were no longer isolated academic enclaves concentrating on teaching, research and specialized patient care, but complex organizations delivering huge volumes of patient services and engaging in a variety of community outreach programs from drug and alcohol rehabilitation to educational enrichment programs for local schools. The academic health centre had also become one of the largest employers in the city, one of the major tax-exempt landowners and businesses, and home to many complex minisocieties.

As academic health centres grew and evolved, a number of conspicuous changes occurred. The education of medical students, once the central mission of medical schools (and their one unique activity), by century's end had become no more than a by-product of what contemporary academic health centres were doing. For most of the 20th century, medical schools had been situated in part in the university and in part in the health care delivery system. By 2000, the medical school's ties to the university had significantly weakened, while its involvement in the healthcare delivery system had correspondingly grown (Ludmerer 1999: 1–348).

The Erosion in Medical Education

After 1965, with so much income of academic health centres coming from patient care, those institutions were increasingly dependent on the goodwill of those who paid the bills. Through the 1980s, third party payers in the United States reimbursed academic health centres without questions or conditions, creating the illusion that the power and good work of academic health centres might continue indefinitely. However, in the 1980s third party payers revolted, creating the "managed care" era that has continued through the present. For the past decade and a half, insurance companies and governments have been much more parsimonious in their payments to

medical schools and teaching hospitals. This has precipitated both a financial and an educational crisis at academic health centres that threatens the training of our country's doctors and ultimately the quality of care available to our citizens.

The most obvious consequence of today's market-driven health care environment for academic health centres is financial. Because of education, research, charity care and a sicker case mix of patients, the costs of teaching hospitals run about 25 to 30% higher than those of community hospitals. Previously, third party payers were willing to accept higher bills from teaching hospitals to cross-subsidize these socially important activities. In the 1990s, however, insurers were increasingly unwilling to do so. Instead, they insisted on paying only for the costs of hospital care actually incurred by their enrollees. Accordingly, the margins of teaching institutions depended on for education and research were whittled away. In 2000, the University of Pennsylvania Health System – one of the country's strongest and best medical centres – suffered a stunning $200 million operating loss. It has been estimated that if current trends go unchecked, as many as two-thirds of teaching hospitals will be operating in the red within five years. Academic health centres in the United States now find themselves in a buyers' market indifferent to their needs – a market where insurers are rapidly withdrawing from the support of socially valuable functions they had nurtured for over half a century.

From the educational perspective, the greatest problems have arisen from the responses of teaching institutions to these financial pressures. In general, academic health centres have responded to lower payments by increasing their patient volume. By caring for enough patients fast enough, they hope to remain solvent, at least for the moment. Such behaviour, though understandable from a purely business perspective, comes at a great price: academic health centres have begun to lose sight of their mission and raison d'etre. Institutional survival is being accomplished, but in the process the core principles those institutions have been entrusted to preserve are being sacrificed. Today, academic health centres are rapidly losing their academic qualities – even as many medical educators and university officials proudly congratulate themselves on their "proactive" behaviour in the changed marketplace.

The market's erosive effects on medical education are exerted in many ways. For instance, fewer and fewer clinical faculty are available to serve as teachers and mentors. Instead, today's faculty are under intense pressure to be "clinically productive" – that is, to see as many paying patients as possible so that they can help keep the medical centre financially afloat. (The common definition of "clinical productivity" at medical schools refers to the amount of professional fees generated, not to the quantity or quality of care. Delivering ordinary care to paying patients is considered clinically productive; delivering outstanding care to charity patients is not.) This writer knows of a chairman of internal medicine at a prestigious medical school who has told his faculty, "If you want to teach, do so at lunch - and keep your lunches short." Because of such pressures, many clinical faculty presently have little time to teach, advise, serve as mentors or conduct research.

Though teachers are important to the learning environment, the opportunity for students to spend ample time with patients is even more critical. In this respect, the marketplace has again been extremely injurious to clinical learning. Through the mid-1980s, the average length of stay at teaching hospitals in the United States was 10 to 12 days. Now, it is three to four days. In part, this change reflects technological advances in medical care, such as the growing use of minimally invasive surgery. However, it largely represents the attempt by third party payers to reduce hospital costs. Short hospital stays have forced medical schools to conduct clinical education in an atmosphere in which speed is the principal mandate for patient care. As a result, students are being converted from active learners to passive observers, with deleterious consequences for their ability to acquire fundamental knowledge and skills.

Among the negative effects of today's clinical environment on the education of students and house officers is its impact on the acquisition of cognitive skills. It is much harder for learners to develop problem-solving abilities when patients are admitted with their diagnoses known and treatment plans already determined. Clinical clerks in surgery, meeting patients under the drapes of the operating table, can still learn about removing a gall bladder, but such encounters do not teach students to recognize the patients who might actually need the procedure from those who do not. Once admitted, patients are often discharged before a diagnosis has been made or the effects of therapy observed – or even before an attending physician has had the chance to confirm a physical finding. These circumstances deprive students of the opportunity to follow the course of disease and treatment and to study their patients in depth.

Of equal concern are the negative implications of this hurried environment for the all-important latent learning of the "hidden curriculum." Habits of thoroughness, attentiveness to detail, questioning and listening are difficult to instil when learning occurs in a clinical environment more strongly committed to patient "throughput" than to patient satisfaction. In addition, it is hard to imagine how caring attitudes can easily be developed when medical education is conducted in a highly commercial atmosphere where a good visit is a short visit, patients are "consumers," and institutional officials speak more often of the financial balance sheet than of the relief of suffering (Ludmerer 1999: 349–99).

Conclusion

Lozon and Fox are correct that academic health centres presently face great challenges. However, the problems these institutions face are far more fundamental than mere "accountability and transparency" as the authors suggest. As the 21st century begins, academic health centres find their core educational mission in jeopardy. A goal of the first (Flexnerian) revolution in American medical education was to make medical education a true university activity by freeing medical professors from having to practise medicine to make a living. Today, as at the proprietary medical schools a century ago, clinical faculty find themselves increasingly dependent on private practice for their livelihood. A central mission of the first revolution was to

create a stimulating learning environment in teaching hospitals to help assure that medical education would be graduate education rather than vocational training. At present, the clinical learning environment is rapidly eroding, with serious implications for the quality of medical education being provided. There is no reason for despair, and viable approaches to resolving these dilemmas have been suggested (Ludmerer 1999: 387–99). However, academic health centres and the public they serve will prosper only if leaders have the insight and courage to address the real problems these institutions face.

References

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