

Case 3

The Transformation of American Medical Education: The Flexner Report

Carnegie Foundation for the Advancement of Teaching, 1906

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Background. In 1905, Andrew Carnegie established the Carnegie Foundation for the Advancement of Teaching (CFAT) as a vehicle for providing financial security and well-being for college faculty members and their families. He tapped Henry Pritchett, president of MIT and a recent acquaintance of Carnegie's, to lead the new foundation.³³ Rather than restrict the trustees of the new foundation to his own strategies and objectives, however, Carnegie gave the trustees the flexibility to determine their own course by which to advance the teaching profession.

Carnegie's personal interest in medicine and medical education was not particularly strong. In "The Best Fields for Philanthropy," the sequel to his famous "Gospel of Wealth," both of which appeared in the *North American Review* in 1889, "the founding or extension of hospitals, medical colleges, laboratories, and other institutions connected with the alleviation of human suffering" appeared third on Carnegie's list of worthy philanthropic causes.³⁴ Consistent with the views he articulated in "Wealth," Carnegie gave priority to those causes aimed at the prevention of illness over those aimed at finding cures. He also praised Vanderbilt's gift to Columbia College for its chemical laboratory. Laboratories, Carnegie thought, were an essential part of any medical college.³⁵

Carnegie's early philanthropy, however, largely neglected the professional education of doctors, focusing instead on the support of college educators and public library construction. Carnegie found the proprietary character of medical education distasteful. His relationship with Henry Pritchett, fifteen years after first articulating his philanthropic priorities, was the real beginning of Carnegie's imprint on medical education.³⁶

Carnegie was not the first philanthropist to operate in the field of medical education. Johns Hopkins, an institution established by the bequest of a Quaker merchant in Baltimore, quickly became a model of academic medical education. Its first president, D.C. Gilman, developed a medical school that rejected the prevalent model of education-by-practitioners in favor of a school that replicated typical university conditions: professors fully dedicated to academic pursuits and a centralized governing hierarchy.³⁷ Two of the school's first faculty members, William Welch and William Osler, would become profoundly influential in medical education reform. Osler's *Principles of Medicine* inspired Rockefeller philanthropic confidant Frederick Gates to promote medical education as a primary object of Rockefeller financial support.³⁸

Strategy. Pritchett, sharing Carnegie's conviction about the great potential of higher education to benefit society, understood well the urgent need for standardization and reform in order to remedy outmoded practices in American colleges and universities.³⁹ Accordingly, he led CFAT to commission a series of studies of the then-current state of many individual parts of higher education and the necessary course of action for reform in each.⁴⁰ Some critics to education reform suggested that using CFAT funds for endeavors outside the pension provision realm Carnegie articulated. In response, one of the trustees of CFAT wrote a letter to the editor of the *New York Times* in which he explained the rationale for studying education:

Mr. Carnegie intrusted [sic] the administration of the fund to men who were themselves necessarily students, as well as administrators, of education, and that their habit of mind led them to look beneath the surface and to face at once the problems on whose wise solution the proper

administration of their trust must depend.⁴¹

The trustee went on to note the particular need for a study of medical education, given the central importance of adequately trained physicians to the nation.

Medical education reform of the style that would soon be championed by a CFAT study found its earliest prominent champion in the Council on Medical Education of the American Medical Association, a group of five academic physicians. This group strongly advocated high academic standards in medical education, and consequently more full-time medical faculty and fewer practitioner-professors. In 1906, the Council conducted its own survey of the medical schools in the United States. Fearing that the impact of its own study might be limited by bias accusations stemming from the fact that a medical organization produced it, the Council chose not to publish its study and instead approached Pritchett and CFAT to propose that it engage in its own study and to offer consulting support.⁴²

In 1906, Abraham Flexner approached CFAT for employment. Flexner had just returned from Europe, where he wrote a critique of American higher education in which he favorably quoted Pritchett. Flexner was able to secure a personal meeting with Pritchett about employment prospects; when nothing materialized at the first meeting, he secured a second. At the second meeting, Pritchett suggested, in accordance with the proposal by the Council on Medical Education, that Flexner undertake a comprehensive evaluation and prepare a report on the state of medical education in the United States and Canada on behalf of the Foundation. In the report, Pritchett noted, Flexner was to identify the best practices of various institutions and to highlight the areas of greatest need and potential for reform. Flexner noted that he had no expertise in the field of medical education, but Pritchett insisted that both his educational expertise and his objective and neutral perspective with respect to medical education made him ideal for the project, as his conclusions would be immune from attack for bias. Flexner agreed to conduct the study, which involved visiting more than 150 medical schools and institutions throughout North America. Flexner also enjoyed the promised cooperation of the Council on Medical Education of the AMA, particularly the advice of two of its members, throughout the study.⁴³

Flexner's first report, *Bulletin Number 4: Medical Education in the United States and Canada*, set off an explosion of unprecedented controversy, protest, and reform in the institutions of medical education.⁴⁴ In that report, Flexner first outlined the current state of medical education and identified the best characteristics of a medical education institution, and then he provided an assessment, often harshly critical, of each medical school in the U.S. and Canada.⁴⁵

Some institutions responded immediately and drastically. Washington University in St. Louis was the subject of some of Flexner's harshest criticisms. Robert Brookings, a wealthy merchant who had recently come to dominate the management of Washington University, requested an immediate audience with Flexner and Pritchett and a subsequent tour of the campus in St. Louis with Flexner. Brookings became convinced of the accuracy of Flexner's criticisms. Shortly after Brookings's second inspection of the medical school, the trustees adopted a plan of reconstruction that required the resignation of every member of the medical school faculty and replacement with faculty members with academic training.⁴⁶ Other medical schools also responded to Flexner's report favorably and with comparable action. The Yale Corporation, for example, approved changes exactly in line with Flexner's suggestions. Many schools, however, reacted negatively and with forceful resistance to criticisms of their programs.⁴⁷

Flexner followed his initial study with a review of the systems of medical education in Germany, Austria, France, England, and Scotland. In *Bulletin Number 6: Medical Education in Europe*, he analyzed the effectiveness of the distinguishing aspects of those systems, and he promoted without reservation the English system of clinical education. He insisted on "a noncommercial relationship between medical school, hospital, laboratory, and university" in the American institutions.⁴⁸

Ironically, Flexner's report had the effect of deterring Carnegie from focusing his own philanthropic resources on reform of medical education. After learning of the report's findings, Carnegie told Flexner, "[y]ou have proved that medical education is a business. I will not endow any other man's business."⁵⁰ Until Carnegie's death, virtually no support for medical education reform came from Carnegie philanthropies.⁵⁰

Those leading the Rockefeller philanthropic endeavors, however, most notably Rockefeller advisor Frederick Gates, reacted quite differently to Flexner's studies. In 1913, Rockefeller's General Education Board (GEB), of which Gates was the chairman, hired Flexner to deploy its resources to catalyze the changes he urged in his bulletins.⁵¹ From his grantmaking post at the GEB, Flexner set to work to raise the standards of medical education dramatically. More specifically, Flexner sought to replicate nationally the model of medical education developed at Johns Hopkins, where the medical faculty devoted themselves "full-time" to clinical work at the university and its affiliated teaching hospital rather than splitting their time between university work and their own private clinical practices.⁵² To that end, the GEB systematically funded the reorganization of select medical schools, including, initially, the medical schools at Washington University in St. Louis, Yale, the University of Chicago, and Vanderbilt University.⁵³ In 1923, the GEB decided, over strong protest by Gates, to expand its mission of medical education reform to public universities in order to allow geographic expansion to the West and the South, including medical schools at the Universities of Iowa, Colorado, Oregon, Virginia, and Georgia.⁵⁴ The Rockefeller Foundation gave a \$45 million grant to the General Education Board to fund its medical education reform efforts.⁵⁵ Funding from other private sources for medical education reform followed.⁵⁶

Impact. CFAT's impact in the realm of medical education through the Flexner reports were at least two-fold. First, the bulletins collected and disseminated on a national basis the latest thinking on what modern medical education could be at its best. Changes at such institutions as Washington University and Yale attest to the immediate impact directly attributable to the study. At a minimum, the Flexner reports served as a catalyst for immediate change that would probably have been achieved over a longer period of time.⁵⁷ Second, by providing Flexner with early resources to establish his expertise that the GEB would later harness to bring about widespread reform, CFAT positioned Flexner as an individual with the empirical knowledge, organizational skills, and reputation necessary to lead a movement of significant reform.⁵⁸ Without CFAT's original support of the Flexner reports, there may have been no Flexner—no central figure of leadership—to drive a national revolution in medical education. Flexner's signal achievement, first in highlighting the universally poor state of medical education and then in marshalling Rockefeller's philanthropic resources to focus on the improvement of medical education, helped to elevate medical education as well as medical research in America to a position of dominant international leadership, from which it has not fallen.⁵⁹

Notes

33. "Carnegie Funds Millions for College Pension Fund," *New York Times*, 4/28/1905, 1.
34. Andrew Carnegie, "The Best Fields for Philanthropy," *North American Review*, 149 (1889), 691.
35. *Ibid.*
36. Stephen C. Wheatley, *The Politics of Philanthropy: Abraham Flexner and Medical Education* (Madison: University of Wisconsin Press, 1988), 22.
37. *Ibid.*, 14–15.
38. *Ibid.*, 27–28.
39. *Ibid.*
40. Henry Pritchett, Introduction, *Medical Education in the United States and Canada*, Abraham Flexner (New York: Carnegie Foundation for the Advancement of Teaching, 1910, Reprint 1972), vii.
41. Nicholas Murray Butler, "The Carnegie Foundation as an Educational Factor," *New York Times*, 1910.

42. Kenneth M. Ludmerer, *Learning to Heal* (New York: Basic Books, 1985), 170.
43. Wheatley, *Politics of Philanthropy*, 47–49.
44. “The Making of Doctors,” *New York Times*, 6/12/1910, 12.
45. Flexner, *Medical Education in the United States*.
46. Wheatley, *Politics of Philanthropy*, 49.
47. *Ibid.*, 50–51.
48. Howard J. Savage, *Fruit of an Impulse: Forty-Five Years of the Carnegie Foundation, 1905–1950* (New York: Harcourt, Brace, 1953), 104–108.
49. *Ibid.*
50. *Ibid.*
51. Raymond B. Fosdick, *The Story of the Rockefeller Foundation* (New York: Harper & Brothers, 1952), 96.
52. Wheatley, *Politics of Philanthropy*, 83.
53. Fosdick, *Story of the Rockefeller Foundation*, 97.
54. *Ibid.*, 99.
55. *Ibid.*, 98.
56. Robert P. Hudson, “Abraham Flexner in Perspective” *Bulletin of the History of Medicine* 46 (1972), 561.
57. Ludmerer, *Learning to Heal*, 192.
58. *Ibid.*, 180.
59. *Ibid.*, 208.