

Three-Year Programs in Medical and Dental Schools: An Appraisal

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SINCE THE EARLY 1960s, the nation's demand for health services has experienced a steady increase and has been matched by a concomitant growth in the supply of health manpower. To meet increased needs for necessary manpower, the nation's educational resources have been thoroughly appraised and monies allocated to strengthen facilities, faculty, and student quality.

Appraisals and analyses provided new insight and prompted fresh approaches to curricular revisions. One innovation has been the 3-year program for health professions. Initially viewed with enthusiasm, this program, since reaching a peak of first-year enrollments and graduates in academic years 1973-74 and 1975-76, has shown strong declines in schools of medicine and dentistry. These declines are graphically demonstrated in a recent report by the Bureau of Health Manpower, Health Resources Administration, which shows enrollments and graduates by discipline, according to data appearing on capitation grant applications (1). Data in that report demonstrate the declines in first-year enrollments and graduates concurrent with the decrease in the 3-year programs in medical and dental schools.

Health Manpower Legislation

Responding to the mounting concern about health manpower shortages, Congress, in 1963, enacted Public Law 88-129, the Health Professions Educational Assistance Program, to provide general support of training for the health professions. This law provided construction aid for the health professions schools (medicine, osteopathy, dentistry, optometry, pharmacy, podiatry, public health, and nursing) and loans to students of medicine, osteopathy, and dentistry.

Two years later, amendments to the 1963 act introduced a formula for providing (a) basic grants to improve education and expand enrollments in schools of medicine, osteopathy, dentistry, optometry, and podiatry and (b) special grants to stimulate accreditation and special educational programs in the schools. Also,

in 1965, the loan program was extended to pharmacy and podiatry students and forgiveness provisions for service in shortage areas were added.

Increasing awareness of health manpower needs was reflected in a series of legislative enactments between 1965 and 1971: the Allied Health Professions Personnel Training Act in 1966, the Health Training Improvement Act in 1970, the Nurse Training Act in 1971, and the Comprehensive Health Manpower Training Act in 1971. The Comprehensive Health Manpower Training Act, which elevated the Federal commitment to the training of health manpower, extended the Health Professions Educational Assistance Program for 3 years and gave new urgency to health professions enrollments, training family practitioners, increasing the numbers of minorities in the professions, and alleviating shortages in underserved areas.

In addition to increasing enrollments and assuring educational quality, a very important concern of the Comprehensive Health Manpower Training Act was to encourage high-priority projects in schools of medicine, osteopathy, dentistry, veterinary medicine, optometry, pharmacy, and podiatry through capitation grants. These grants, based on the numbers of enrolled students, provided financial support and were successful in significantly increasing enrollments and outputs. Beyond that, however, the Comprehensive Health Manpower Training Act does not seem to have achieved all its purposes. For example, as stated in an unpublished report by the Bureau of Health Manpower, "there is little evidence, except for the nurse practitioner program, that priority projects have been initiated. Evidence suggests capitation may be right if Federal policy declares for unrestricted support to 'a national resource'; if that policy leans towards priority problems (e.g. specialty and geographic distribution), capitation gives little promise of success."

Three-Year Schools

The Carnegie Commission, among its 1970 recommendations, suggested shortening the duration of pre-medical education by reinstating the 3-year program. The accelerated or 3-year program of undergraduate medical training was first tried during World War II

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(the V12 and Armed Services Training Program—ASTP). Schools returned to the 4-year program after the war (2).

In the late 1960s and early 1970s, to make available more health practitioners, a number of medical schools revised curricular content and reduced from 4 to 3 the number of years of schooling required for the MD degree. In several schools, two options were offered: graduation in 3 years, or election of a 3- or 4-year course. Concurrent Federal legislation that granted financial advantages encouraged choice of the 3-year curriculum.

Between academic years 1970-71 and 1973-74, the first-year enrollments rose steadily in the 3-year medical school programs (from 671 to 2,597). The sharpest increase occurred with the enactment of Public Law 92-157, Comprehensive Health Manpower Training Act, between 1971-72—1,080 and 1972-73—2,273. This interval of increasing enrollments was followed by an equally persistent decline, beginning in 1974-75 with 2,434 enrollments and continuing to 1978-79 with 1,455. This decline was steady with almost equal decreases to 1978-79.

Matching these developments, the number of gradu-

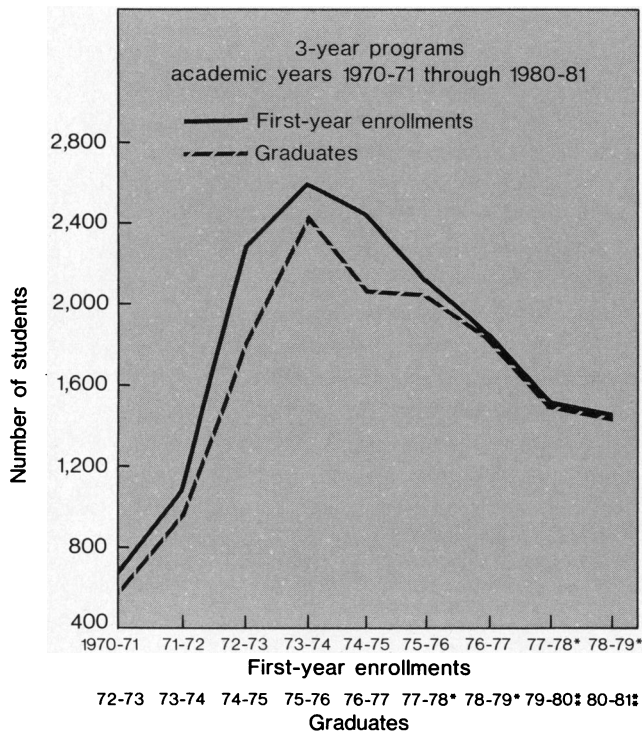
ates from these programs increased—580 in 1972-73 to 2,439 in 1975-76, then showed a continuous decline from 2,063 in 1967-77 to an estimated 1,858 in 1978-79 (fig. 1).

Three-year programs in schools of dentistry experienced comparable growth and decline. First-year enrollments rose from 206 in 1970-71 to 327 in 1971-72, jumped precipitously by more than 400 percent (1,445) in 1972-73, and peaked at 1,693 in 1973-74. Enrollments continued at a gradual decline after 1973-74 to an estimated 782 in 1978-79.

The numbers of graduates of the 3-year programs at schools of dentistry increased sharply from 120 in 1970-71 to 1,585 in 1975-76, then declined to an estimated 1,275 in 1978-79 (fig. 2).

In late 1973, a questionnaire (3), prepared by Dr. Robert G. Page, Medical College of Ohio at Toledo, and Dr. James G. Boulger, University of Minnesota School of Medicine, was distributed to every medical school dean in the United States to elicit information and views on the 3- and 4-year programs. Responses from 105 deans (72 at schools with 4-year programs, 16 at schools with 3-year programs, and 17 at schools

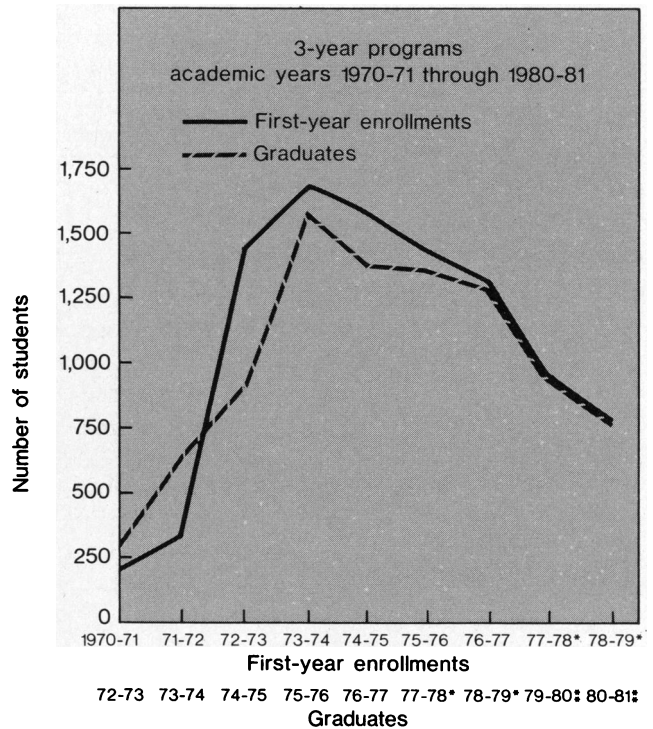
Figure 1. Selected enrollment data for schools of medicine



*Estimated

‡Based on ratio: graduates (1978-79)/first-year enrollments (1976-77) multiplied by first-year enrollments in academic years 1977-78 through 1978-79, respectively.

Figure 2. Selected enrollment data for schools of dentistry



*Estimated

‡Based on ratio: graduates (1978-79)/first-year enrollments (1976-77) multiplied by first-year enrollments in academic years 1977-78 through 1978-79, respectively.

NOTE: Graduates exceed first-year enrollment as a result of changes in programs, e.g., from 4 to 3 years.

that provided a choice) revealed that 33 schools in 1974-75 (compared with 19 in 1969) had a 3-calendar year MD degree program. Where both programs were available, only 22.5 percent of the students chose the 3-year program. Nevertheless, in the 15 schools that offered both programs, only one showed any difference in student performance—an earlier career choice by the 3-year students. Of those choosing the shorter curriculum, 89 percent liked the program and successfully completed it. In predominantly 3-year schools, 95 percent of the students were graduated in 3 years.

Although 96 percent of the respondents regarded the program as “quite successful” and worthy of remaining an “available option,” few thought it should be standard for all schools, even though the same overwhelming majority reported no apparent differences in graduates of the two curriculums. Ninety-two percent believed that 3-year students should be as capable as 4-year students in research careers or faculty positions.

Decline in 3-Year Programs

The questionnaire sheds some light on possible reasons for declining enrollments and graduates in the 3-year curriculum. Such declines are noteworthy because all available evidence indicates that graduates of the two curriculums showed no appreciable differences. At the University of Minnesota, for example, where the traditional curriculum was revised and the length of schooling curtailed, a comparison of a 3-year class and a 4-year class revealed no consistent major differences for any dependent variable, except age and some personality and attitude measures. Scores on admission tests, biographical information, final examination grades in all required courses, and scores on a nationally standardized basic science certification examination were similar for both classes (4).

One criticism made by some deans in the Page-Boulger study was that the curtailed curriculum did not permit sufficient time for career decisions. The deans, after surveying faculty and students, reported that another criticism—stemming mainly from faculty—was that students had insufficient time to digest what they had learned. Faculty dissatisfaction with the 3-year curriculum was reported also by Dr. A. F. Hoffman, professor at the California College of Podiatric Medicine, who surveyed 12 medical schools, 1 dental school, and 1 school of podiatric medicine. In both the Hoffman study and the Page-Boulger study, it was reported that students generally appeared favorable to the curtailed curriculum and reported no regrets about selecting the 3-year course.

Although little substantive information was elicited from these studies, the available evidence did show that

dissatisfaction with the shorter program emanated almost entirely from faculty. In addition to the items noted, faculty complained of excessive demands on their time, overworking, and overcrowded classrooms and facilities. Faculty members also appeared to be disturbed by cutbacks in course schedules, changes in work plans and other commitments, shortened vacations, and reduced remuneration emanating from increased costs of hiring additional faculty.

Conclusions

The picture that emerges from the several studies of the institutions that have introduced the new curriculum is unclear and in need of further delineation (5). Questionnaire responses indicate that the 3-year program was successful; however, an underlying apprehension is reflected in the undue caution displayed by most of the respondents in discussing the subject. The majority of questionnaire respondents agreed that the products of the 3- and 4-year courses were equally competent. The contrast between faculty discontent and the general agreement that the program was a success points to the need for continued investigation of how the program affects students, faculty, and administrators. Useful research approaches might include such matters as (a) how major program changes stimulated by external sources will affect an institution, (b) anticipating faculty attitudinal reactions and their effects, and (c) the institution's ability to foresee and make adequate preparation for a successful new program (6-8).

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