March 2024

Examining Long-Term Trends in Reported Tuition and Fees Revenues at U.S. Medical Schools

As of fiscal year (FY) 2022, tuition and fees revenues represent around 3% of total revenue for U.S. MD-granting medical education programs with full Liaison Committee on Medical Education (LCME) accreditation.[1] While a relatively small proportion of total revenue, tuition and fees serve as a direct revenue source that supports essential operational and educational functions and can be critical to maintaining financial sustainability. Due to the costs of tuition and the education debt carried by many medical students, some have called for medical school tuition and fees to be abolished, while others maintain a more modest perspective.[2] As this ongoing debate highlights, there is an intricate relationship between medical school tuition and fees revenues and the overall financial health of medical schools that warrants consideration.

By examining the following questions, this data snapshot may aid stakeholders in understanding the current trends that could impact budgeting and resource allocation decisions. These decisions ensure the continued excellence of medical education and the well-being of both students and academic institutions. First, this snapshot provides a trend analysis to examine how tuition and fees revenues have changed over time from FY 2001 through FY 2022 and, within this context, examines how state and parent institution support revenues have also changed over time. Second, it compares how public and private medical schools have reported recorded tuition and fees expenditures compared to respective revenues (see Appendix 1 and 2 for detailed definitions and the marginal revenues formula).

Methods

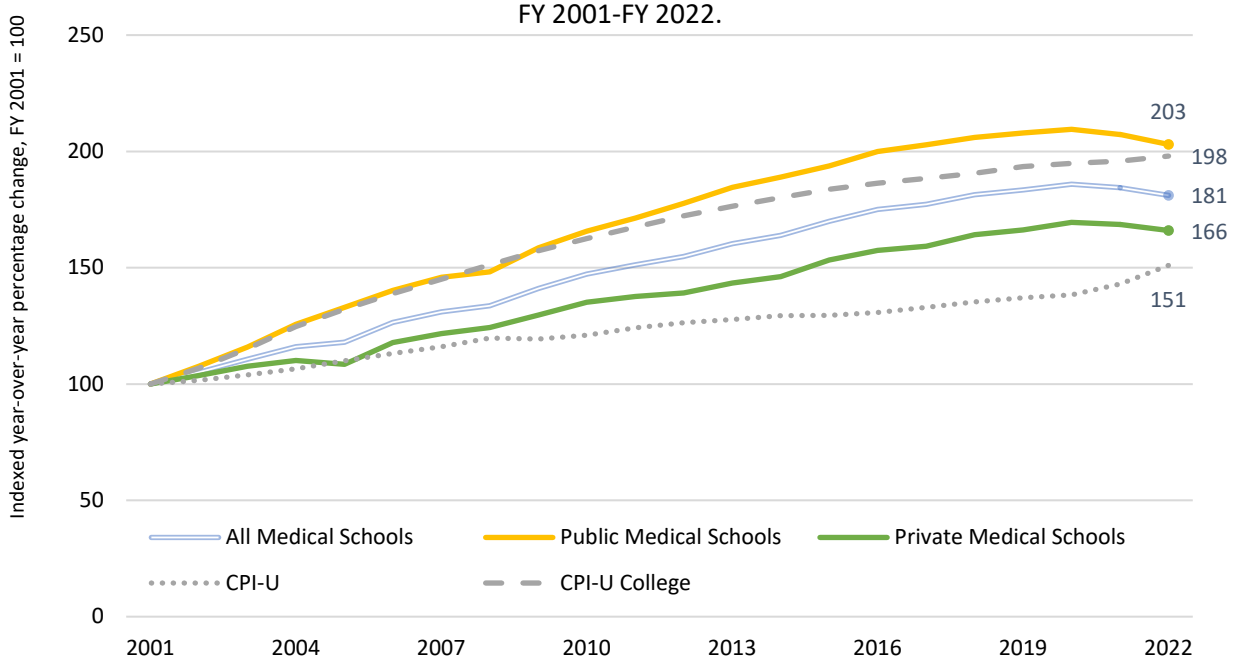
Data used for this snapshot were derived from responses submitted by all fully accredited U.S. MD-granting medical education programs to the LCME Part I-A Annual Financial Questionnaire (AFQ). Tuition and fees revenues were compared to state and parent institution support revenues reported from FY 2001 onward. In FY 2006, the AFQ began collecting tuition and fees expenditures recorded in medical school accounts per se alongside respective revenues. Marginal tuition and fees revenues (i.e., the proportion of tuition and fees dollars remaining less expenses from tuition and fees revenue dollars), were calculated based on reported tuition and fees revenues and expenditures recorded in medical school accounts per se from FY 2006 onward (see Appendix 1 and 2).

To illustrate inflation over time, some data comparisons below show yearly percentage changes that were calculated by indexing those values to a base of 100. In these comparisons, dollars were adjusted to constant 2022 dollars, and comparisons were made against the Consumer Price Index[3] for All Urban Consumers (CPI-U) and the CPI-U college tuition and fees index (CPI-U College) to better understand U.S. medical school

tuition and fees revenues in relation to inflationary pressures, affordability, and the sustainability of medical education programs.

Findings

Figure 1. Indexed year-over-year percentage change in tuition and fees revenues of U.S. medical schools by medical school type and CPI data, FY 2001-FY 2022.



Note: All underlying dollar values were converted to 2022 dollars using the CPI-U.

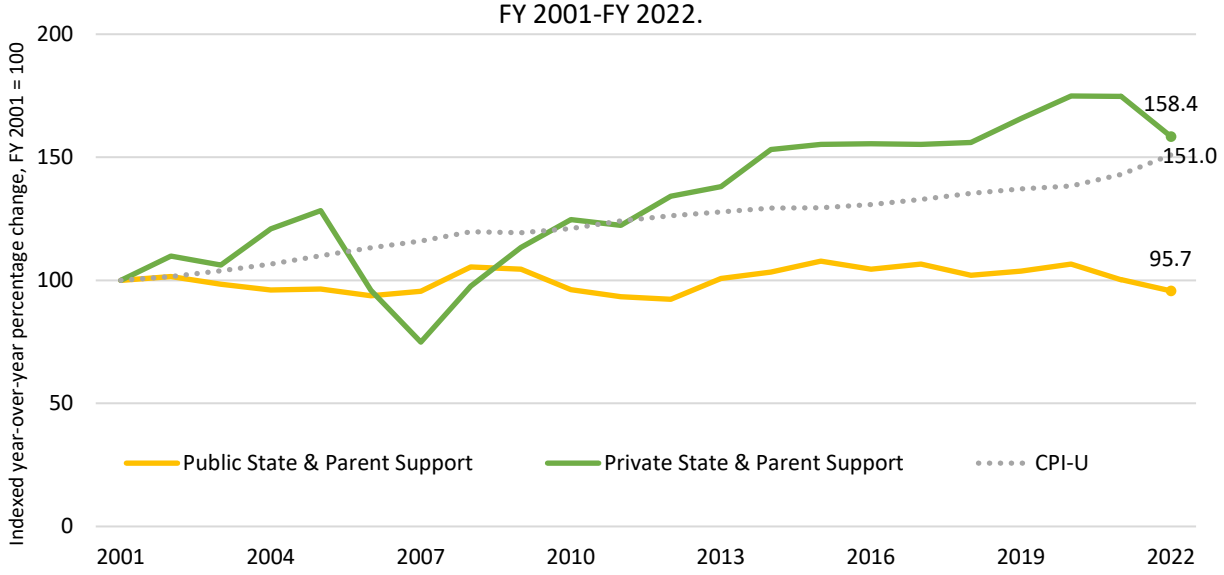
Key Takeaways for Figure 1:

- U.S. medical school tuition and fees revenues growth outpaced general inflation: Over a 21-year period, indexed year-over-year percentage change in tuition and fees revenues increased by 81% across all medical schools (equivalently, tuition and fees revenues in 2022 constant dollars increased by 120% across the entire period), surpassing general inflation. Further research is needed to better understand the interplay between medical school tuition and fees and the overall cost of education.

- U.S. medical school tuition and fees revenues growth lagged the CPI-U College: While both measures show an upward trend, these data suggest that, generally, college tuition and fees revenues increased at a rate faster than the tuition and fees revenues assessed to students reported by U.S. medical schools.

- Public U.S. medical school tuition and fees revenues growth outpaced private U.S. medical school tuition and fees revenues and the CPI-U:
  Indexed year-over-year percentage change in public U.S. medical school tuition and fees revenues increased 103% (equivalently, public U.S. medical school tuition and fees revenues in constant dollars increased by 169% across the entire period), compared with private medical schools at 66%, the general CPI-U at 51%, and the CPI-U College at 98%. These data suggest that public medical school tuition and fees revenues increased at a rate faster than private medical school tuition and fees revenues, the cost of general living, and the cost of college tuition and fees.

Figure 2. Indexed year-over-year percentage change in state and parent support revenues of U.S. medical schools by medical school type and CPI-U, FY 2001-FY 2022.



Note: All underlying dollar values were converted to 2022 dollars using the CPI-U.

Key Takeaways for Figure 2:

- When compared, public U.S. medical school tuition and fees revenues and state and parent institution support revenues trends diverged:
  Indexed year-over-year percentage change in state and parent institution funding support for public medical schools declined by 4% (equivalently, state and parent institution funding support in constant 2022 dollars declined by 6% across the entire period) and consistently lagged inflationary growth. While the interplay between state and parent institution revenues and tuition and fees revenues is nuanced, for public medical schools that presumably rely more on the state and parent institution revenue sources, reductions in state and parent institution

revenues might lead these public medical schools to seek alternative revenue sources, including raising tuition and fees.

Figure 3. Public U.S. medical school recorded tuition and fees revenues as a percentage of total tuition and fees revenues alongside recorded tuition and fees marginal revenues, FY 2006-FY 2022.

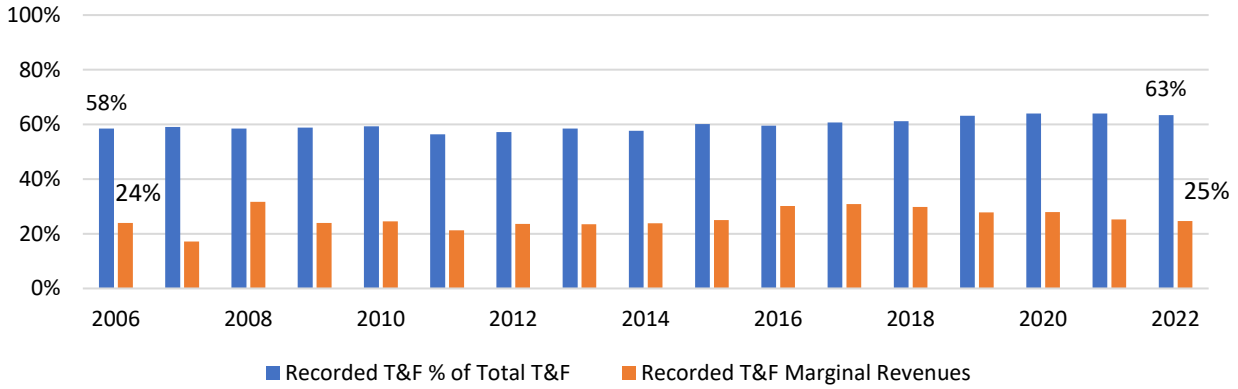
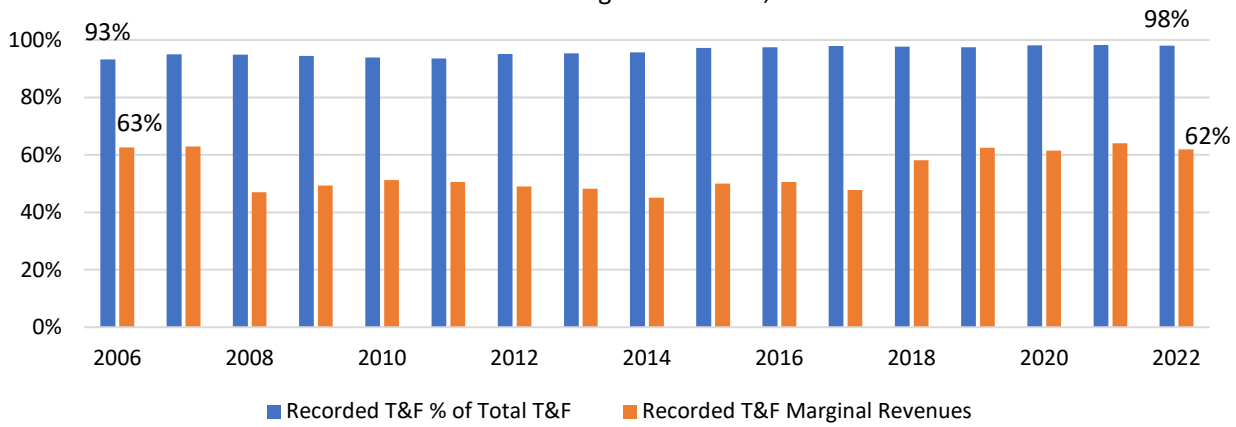


Figure 4. Private U.S. medical school recorded tuition and fees revenues as a percentage of total tuition and fees revenues alongside recorded tuition and fees marginal revenues, FY 2006-FY 2022.



Key Takeaways for Figures 3 and 4:

- Recorded tuition and fees revenues were a smaller percentage of total (i.e., recorded plus not recorded) tuition and fees revenues for public U.S. medical schools than for private U.S. medical schools:
  Between FY 2006 and FY 2022, the percentage of total tuition and fees revenues recorded on the books of public U.S. medical schools averaged 60% compared with 96% for private U.S. medical schools. Public U.S. medical school tuition and fees marginal revenues averaged 26% compared with 54% for private U.S. medical schools — meaning that for every $100 of tuition and fees revenues

recorded on the medical schools' books, public medical schools kept roughly $26 on average, whereas private medical schools kept roughly $54 on average.

Conclusion

These findings may provide institutional context to existing research on the cost of attendance[4] (COA) and the cost of medical education in general. Importantly, the tuition and fees revenues discussed in this snapshot differ from total COA data as reported on the annual AAMC Tuition and Student Fees Questionnaire, which includes tuition, fees, health insurance, and other costs such as living expenses. Additionally, these costs vary by enrollment year, where first-year students historically pay less than fourth-year students.

That said, three observations are worth noting. First, it should be stated that public medical education (tuition, fees, and health insurance) costs substantially less than private medical education.[5] However, total cost of attendance not only grew more quickly at public medical schools than at private medical schools, as previously reported,[4] but public medical school tuition and fees revenues also grew faster than inflationary indices (Figure 1). Nonetheless, public U.S. medical school tuition and fees revenues represented approximately 3% of total revenue,[6] while for U.S. public degree-granting postsecondary institutions, tuition and fees revenues represented approximately 16% of total revenue.[3]

Second, from FY 2001 through FY 2022, state and parent institution support revenues for public medical schools declined 6% in constant 2022 dollars. Meanwhile, private medical school state and parent institution support revenues grew 48% in constant 2022 dollars. This finding is consistent with national trends suggesting that among public, four-year colleges, the primary driver of rising tuition was declining state funding for higher education.[7]

Finally, public medical schools retained a smaller percentage of total tuition and fees revenues compared with private medical schools, indicating that public medical schools had less direct control over these dollars and their subsequent use. Meanwhile, for the tuition and fees revenues controlled at the medical school level, public medical schools also expended a greater percentage of medical school-controlled tuition and fees revenues compared with private medical schools. These trends should be considered alongside the general differences in financial dynamics between publicly and privately owned medical institutions.

This research provides key insights that underscore the complex financial forces shaping the affordability and accessibility of medical education. Further monitoring of these trends and how the support of other revenue sources, namely from medical services, will play a role in influencing the cost of medical education appears warranted.

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Appendix 1: Definitions From the LCME Part I-A Annual Financial Questionnaire on Medical School Financing

Recorded: Revenues or expenditures recorded in medical school accounts (i.e., recorded on the books of the medical school).

Examples of "recorded" revenues and expenditures:

1) Tuition and fees collected by the medical school and recorded in medical school accounts.
2) State appropriations passed through the parent institution, allocated to the medical school, and recorded in medical school accounts.

Not recorded: Revenues and expenditures that materially benefit medical school activities but are not recorded in medical school accounts (i.e., the medical school has no direct control over expenditures).

Example of "not recorded" revenues and expenditures: Tuition and fees charged to students majoring in graduate programs administered by the medical school that are collected and retained by the parent institution.

Tuition and fees: Tuition and fees (net of refunds) collected from students enrolled in academic degree programs administered by the medical school and from courses offered by the medical school (e.g., continuing education).

Tuition and fees expenditures: Expenditures of the reporting period of funds related to tuition and fees revenues recorded in medical school accounts.

State and parent institution support: Expenditures of the reporting period of funds originating from actions of a state government, the allocation of operating funds to the medical school from the parent institution, or both. State and parent institution funds budgeted to the medical school may include a combination of state appropriations and other funds (e.g., tuition revenues).

Author's note: It should be noted that while state government and parent institution support revenues are affected by different factors, the AFQ provides the following context on the potentially commingled nature of these fund sources in Frequently Asked Question 20:

> For public medical schools, general operating support from the parent institution most often consists of commingled funds from multiple sources including state appropriations to the parent institution, tuition revenues, and facilities and

administrative cost recoveries from sponsored programs. Although most schools cannot segregate state funds from other funds included in the annual operating allocation from the parent institution, a few public schools made a distinction between parent institution support and state appropriations. To provide better benchmarking data and eliminate confusion, the two categories have been consolidated.

Appendix 2: Recorded Tuition and Fees Marginal Revenues Formula

Marginal Revenues = (Recorded Tuition and Fees Revenues – Recorded Tuition and Fees Expenditures) / Recorded Tuition and Fees Revenues

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