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## ORIGINAL ARTICLE

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### Student loan debt and income among chiropractors: A description of consultancy data

Samuel M. Schut, DC, Dana J. Lawrence, DC, MMedEd, MA, and Geronimo Bejarano, MPH

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#### ABSTRACT

**Objective:** To describe student loan debt and income of doctors of chiropractic (DC) who sought private student loan counseling.

**Methods:** A descriptive analysis of de-identified client records from a student debt consulting firm (Student Loan Planner<sup>®</sup>) was conducted. Data regarding chiropractic programs, cumulative student loan amounts, and current incomes at the time of consultation were abstracted. Descriptive statistics were reported.

**Results:** Consultations ( $n = 448$ ) were completed with DCs between March 2017 and August 2023. Nearly half (44.2%) reported student loan indebtedness between \$150,000 and \$249,999 with another 35.7% indicating between \$250,000 and \$349,999. The mean student loan debt was \$249,149 (SD: \$82,892) with a median of \$240,000 (interquartile range [IQR]: \$199,507–\$295,390). The mean income for DCs in this sample was \$81,305 (SD: \$47,495) with a median income of \$75,000 (IQR: \$50,000–\$100,000). The mean debt-to-income ratio was 4.11 (SD: 2.93) with a median of 3.38 (IQR: 2.21–5.16). Sixteen consultees possessed a debt-to-income ratio below 1.00, whereas more than a quarter (26.3%) of consultees reported a debt-to-income ratio greater than 5.00.

**Conclusion:** DCs seeking debt guidance commonly carry substantial student loan debt that far exceeds their income. Our findings highlight that the student loan debt crisis includes DCs.

**Key Indexing Terms:** Chiropractic; Student Loan; Income

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#### INTRODUCTION

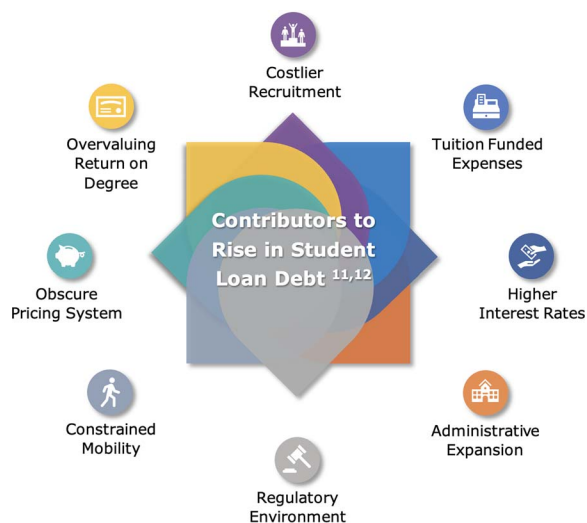
For most health professional graduates, a career in health care is inevitably accompanied by student loans.<sup>1–5</sup> Student loan debt in the United States has more than tripled in the past 2 decades, rising from \$480 billion in the first quarter (Q1) of 2006 to more than \$1.77 trillion in Q1 2023.<sup>6</sup> As of 2020, the average amount borrowed by bachelor's degree graduates who have ever received federal student loans was \$45,300.<sup>7</sup> Individuals seeking to pursue graduate education regularly face significantly higher student loan debt.<sup>8,9</sup> As of Q3 2023, student loans constitute the 2nd largest debt category among Americans, trailing behind only household mortgages.<sup>10</sup> Cain and colleagues previously summarized the predominant contributors to this rise, specifically in the context of pharmacy education.<sup>11</sup> These included administrative expansion, higher loan interest rates, schools' tuition dependency to fund operating expenses, and costlier recruitment practices (eg, state-of-the-art amenities).<sup>11</sup> Recent evidence suggests 4

additional explanatory factors regarding tuition escalation across the scholastic landscape. These include that aspiring students tend to overvalue their return on investment from a college degree, the obscure system of pricing makes cross-collegiate comparison difficult, constrained student mobility restricts local competition among institutions, and regulations limit lower cost business models from contending with existing educational providers (Fig. 1).<sup>12</sup>

Although public-facing empirical evidence is limited and aggregate enrollment nationwide is not well understood, enrollment in doctor of chiropractic (DC) programs appears to be increasing with 1 program reporting record-breaking enrollment at 2 separate campuses in 2022.<sup>13</sup> The US Bureau of Labor Statistics (BLS) projects that the employment of DCs is expected to expand 10.0% from 2021 to 2031, which is faster than average for all occupations.<sup>14</sup> Almost a decade ago, Lorence and colleagues surveyed the fiscal attitudes, knowledge, and habits of 57 chiropractic students at a single US chiropractic college.<sup>1</sup> They found that 73.7% of students estimated they would owe more than \$125,000 in student loans after chiropractic college with 28.1% estimating owing

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**Figure 1** - Contributors to the rise in student loan debt nationally.

more than \$175,000.<sup>1</sup> However, this study quantified information on anticipated educational debt among chiropractic students rather than actual debt upon graduation. More recent, analysts with *The Wall Street Journal* reported that DCs who graduated between 2015 and 2016 carried median student debt 3 times median earnings 2 years later with some as high as 7 times.<sup>15</sup> According to the BLS, mean and median annual wages for DCs in 2022 was \$75,380 and \$83,720, respectively.<sup>14</sup> Whereas the BLS collects wage information directly from employers, it does not collect or report information from self-employed workers, owners, or partners of unincorporated businesses and, therefore, lacks wage representation from DCs who operate in these roles.<sup>16</sup> In the 26th Annual Salary & Expense Survey by Chiropractic Economics, 354 DCs or surrogate respondents (ie, office staff) across the United States reported a diverse range of practice types (eg, self-employed, associates, group practices, and integrated/multidisciplinary settings) with salaries averaging between \$93,583 and \$143,444 depending on the setting.<sup>16</sup>

These salaries, however, do not take into consideration if the value of DCs' earning potential is commensurate to the burden of debt that they bear during their studies. This information could be of particular import to current and future students, chiropractic program administrators, and employers. Among others, these stakeholders would likely benefit by better understanding the student loan debt and income of contemporary DCs. Due to limited data availability pertaining to the student loan debt of all DCs broadly, we used a novel data set of DCs. Given this context, the purpose of this study is to describe the student loan debt and income of DCs who sought student loan counseling.

## METHODS

This cross-sectional study follows the Strengthening the Report of Observational Studies in Epidemiology guidelines.<sup>17</sup> This analysis was conducted using self-reported client data from a private debt consulting company. The company, Student Loan Planner<sup>®</sup>, is a student debt consulting firm that

has developed custom planning strategies regarding debt repayment for more than 11,500 clients.<sup>18</sup> Student Loan Planner<sup>®</sup> provided a de-identified data set of all chiropractic client records between March 2017 and August 2023. Per the Office for Human Research Protections decision trees, notably chart 1, this does not constitute human subject research by definition and does not, therefore, require submission to an institutional review board.<sup>19</sup> Data regarding chiropractic programs, cumulative student loan amounts, and current incomes at the time of consultation were imported into Microsoft Excel (Microsoft Corp.).

Debt-to-income ratios (DTIs) were calculated for each consultee individually by dividing cumulative student loan debt by gross annual income, akin to the methodologies of prior studies.<sup>8,20</sup> As a measure of income obligation, DTIs display how much of an individual's income is already spoken for by present or future debt payments. Accordingly, this measure of financial stability may better represent how graduates actually experience debt load compared with more precise ways to measure return on investment.<sup>21</sup> A DTI greater than 1.00 denotes student debt amounts being greater than income, whereas DTIs less than 1.00 denote income in excess of student debt.

Descriptive statistics were reported with proportions generated for categorical variables and mean and median for continuous variables. Values not adding up to 100% were due to rounding.

## RESULTS

Consultations ( $n = 448$ ) were completed with DCs between March 2017 and August 2023. Fourteen different US-based chiropractic programs were represented among 394 consultees with 54 individuals (12.1%) lacking this information. Current levels of student loan debt, annual income, and DTIs are reported in Table 1. Student loan debt included all graduate and undergraduate debt. Nearly half (44.2%) of DCs reported student loan indebtedness between \$150,000 and \$249,999, and 35.7% indicated between \$250,000 and \$349,999. The mean and median student debt was \$249,149 (SD: \$82,892) and \$240,000 (interquartile range [IQR]: \$199,507–\$295,390), respectively. Only 1 DC reported a total student loan balance of less than \$50,000, and 11 reported between \$450,000 and \$550,000. The mean income for DCs was \$81,305 (SD: \$47,495) with a median income of \$75,000 (IQR: \$50,000–\$100,000). Incomes ranged between \$12,000 and \$500,000. Nearly half (46.2%) reported a salary between \$25,000 and \$74,999, whereas slightly fewer DCs (166/448, 37.1%) indicated a salary between \$75,000 and \$124,999. The mean DTI was 4.11 (SD: 2.93) with a median of 3.38 (IQR: 2.21–5.16). DTIs ranged from 0.39 to 22.53. Only 16 DCs reported a DTI under 1.00, whereas more than a quarter (26.3%) reported a DTI greater than 5.00.

## DISCUSSION

This study presents a descriptive analysis of DCs who sought guidance from a student debt consulting firm and builds upon the knowledge garnered by a previous assessment of the expected student loan indebtedness among chiropractic students.<sup>1</sup> These

**Table 1 - Student Debt and Income Among Chiropractic Graduates (n = 448)**

Variable	n (%)
Student loan debt	
None	0 (0.0)
<\$50,000	1 (0.2)
\$50,000–\$149,000	44 (9.8)
\$150,000–\$249,999	198 (44.2)
\$250,000–\$349,999	160 (35.7)
\$350,000–\$449,999	34 (7.6)
\$450,000–\$550,000	11 (2.5)
Income	
<\$25,000	15 (3.3)
\$25,000–\$74,999	207 (46.2)
\$75,000–\$124,999	166 (37.1)
\$125,000–\$200,000	47 (10.5)
>\$200,000	13 (2.9)
Debt-to-income ratio	
<1.00	16 (3.6)
1.00–1.99	79 (17.6)
2.00–2.99	95 (21.2)
3.00–3.99	86 (19.2)
4.00–4.99	54 (12.1)
>5.00	118 (26.3)

findings extend our understanding of contemporary student debt and income in the chiropractic profession.

It is common for chiropractors seeking debt counseling to face considerable student loan debt from their education, markedly exceeding their income in many cases. As illustrated in Figure 2, the mean student loan debt for DCs was nearly \$250,000 US dollars (\$249,149). Median student debt was nearly 3.25 times median earnings of the consultees in concert with the data reported by *The Wall Street Journal* analysts.<sup>15</sup> Eighty percent of DCs reported student debt between \$150,000 and \$349,999, consistent with the findings by Lorence et al.<sup>1</sup> Furthermore, the mean and median income of DCs in this data set were similar to those reported by the BLS. These findings differ from the salaries reported by *Chiropractic Economics* as well as Salary.com—which leverages commercially published compensation data—and reports median earnings for DCs in excess of ours at \$165,283.<sup>22</sup>

Using hypothetical scenarios based on public-facing data, Shields and Dudley-Javoroski modeled the economic value of a physical therapy career relative to other health care professions and the manageability of student debt repayment by these professions.<sup>23</sup> The study used an economic metric called net present value to represent the time value of money and assumed rates of return for each of the professions. For DCs, they estimated the income for an entry-level salary using the 25th percentile of the median annual wage from the BLS Occupational Employment Survey and the student debt reported by Lorence et al.<sup>1</sup> The researchers concluded that DCs were unlikely to meet recommended debt repayment benchmarks as a proportion of total income, using any fixed payment plan available. Additionally, compared with 15 other health care professions, chiropractic had the 2nd lowest salary compound annual growth rate, immediately trailing dentistry,



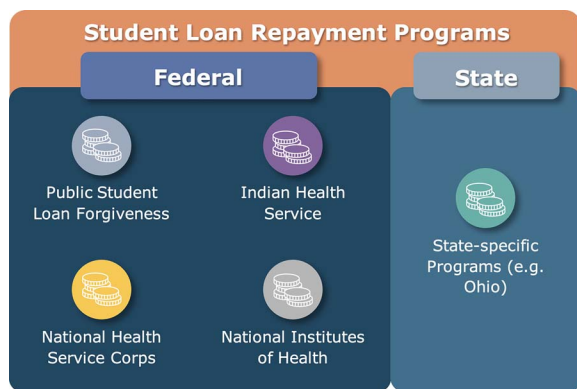
**Figure 2 - Student loan burden of the average chiropractor is nearly \$250,000.**

obstetrics/gynecology, and family/general practice medicine.<sup>23</sup> More recently, Shields et al found that DCs could only meet the advisable debt ratio under 2 income-driven repayment plans that peg loan payments at a maximum of 10.0% of discretionary income. Based upon their modeling approaches, even though more than \$200,000 in loans would be discharged after 20 years, this sum would be reported as taxable income during the year of forgiveness, potentially resulting in significant tax obligations for DCs. Moreover, chiropractic had the lowest net present value of all modeled professions and did not meet the net present value of a bachelor's degree.<sup>24</sup>

Several government student loan repayment and forgiveness programs can provide health professional graduates with options to curtail the amount of debt that they are required to pay back on federal educational loans (Fig. 3).

The Public Student Loan Forgiveness program discharges the remaining balance on student loans after an individual has made 120 monthly payments using a qualifying repayment plan while working full-time for a qualifying organization. Yet a principal barrier for DCs aspiring to participate in this debt relief program is that employment opportunities in qualifying organizations are scarce, resulting in only a minimal number of DCs meeting Public Student Loan Forgiveness eligibility.<sup>25–29</sup>

The National Health Service Corps loan repayment program offers clinicians the opportunity to have a portion of their student loans repaid in exchange for practicing, either full or part time, in areas designated medically underserved by the federal government.<sup>30</sup> Although the American Chiropractic Association



**Figure 3** - Student loan repayment programs.

has worked to include chiropractors among eligible provider types, to date, no amendments have been enacted to include them.<sup>31</sup> Recently, the state of Ohio passed a bill creating a loan repayment program under which a portion of a chiropractor's student debt will be repaid if the provider agrees to serve 2 years in a "chiropractic health resource shortage area."<sup>32</sup>

The National Institutes of Health loan repayment program may discharge up to \$50,000 per year of a researcher's qualified education debt in return for a commitment to engage in a relevant line of research.<sup>33</sup>

The Indian Health Services loan repayment program will repay medical professionals who are willing to practice in health facilities serving Alaskan Native or American Indian communities for at least 2 years.<sup>34</sup> To our knowledge, only a few chiropractors have ever served in these facilities.

### Limitations

Data regarding demographics, loan type/interest rate, practice setting, years since graduation, commission structure, income source, remaining loan durations, current loan amounts vs at graduation, and additional degrees held by those consulting the debt service were unavailable for analysis, which may affect the generalizability of this study. DCs who seek advice from a student debt consulting company may possess different student loan debt and/or income than those who do not seek such assistance. Whereas it can be assumed that not every graduate does, every single consultee possessed student loan debt. Moreover, there are likely wage differences between self-employed and employee DCs that bias the wages reported and may help account for the observed disparities among data sources. These discrepancies underscore the need for a more rigorous assessment of income within the chiropractic profession. Each individual's student loan debt was consolidated in the data set irrespective of its period of acquisition (ie, during graduate vs undergraduate studies), thus precluding differentiation in our analysis. Finally, it is unknown what proportion of student debt was a result of direct vs indirect educational costs.

### CONCLUSION

This report describes the state of student loan debt and income among DCs who sought advice from a student loan consulting firm. It demonstrated that it is common for

chiropractors seeking debt guidance to carry substantial student loan debt that far exceeds their income. Our findings highlight that the student loan debt crisis includes DCs.

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### About the Authors

Samuel Schut (corresponding author) is a chiropractic resident at the VA Connecticut Healthcare System (950 Campbell Ave, West Haven, CT 06516; samuel.schut@va.gov). Dana Lawrence is the senior director of faculty development and special projects at Parker University (2540 Walnut Hill Ln, Dallas, TX 75524; dlawrence@parker.edu). Geronimo Bejarano is a doctoral student in the department of health services-policy and practice at Brown University (450 Brook St, Providence, RI 02906; geronimo\_bejarano\_cardenas@brown.edu). This article was received December 5, 2023; revised December 27, 2023, April 24, and May 30, 2024; and accepted June 28, 2024.

### Author Contributions

Concept development: SMS. Design: SMS. Supervision: SMS. Data collection/processing: SMS, GB. Analysis/interpretation: SMS, GB, DJL. Literature search: SMS, DJL. Writing: SMS, GB, DJL. Critical review: SMS, DJL, GB.

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