It is time for colleges and schools of pharmacy to examine and confront the rising costs of pharmacy education and the increasing student loan debt borne by graduates. These phenomena likely result from a variety of complex factors. The academy should begin addressing these issues before pharmacy education becomes cost-prohibitive for future generations. This paper discusses some of the more salient drivers of cost and student debt load and offers suggestions that may help alleviate some of the financial pressures.

**Keywords:** student loan, debt, tuition, higher education

**INTRODUCTION**

The rising cost of higher education in the United States is a disturbing trend. Pharmacy school tuition and resulting student indebtedness have risen significantly over the last decade. Initial assumptions typically suggest that the responsibility for increased student loan debt belongs to students. However, we assert that rising tuition and student debt is a multifaceted, complex issue that has origins within the academy, the accreditation process, federal and state governments, universities, and finally student and faculty culture. Reducing or even maintaining current cost levels for pharmacy education and concomitant student debt will not be straightforward, easy, or without controversy, but it is imperative that the academy confront the issues before they worsen. In this paper, we discuss some of the more notable influences on cost and student debt load and suggest potential actions that may allay the financial burdens.

**REDUCED STATE SUPPORT OF HIGHER EDUCATION**

Faced with financial pressures from the recent economic recession, state legislatures have significantly reduced higher education funding over the last several years. At first, most public institutions absorbed state funding reductions through spending cuts and efficiency measures. However, after those means were exhausted, the only major recourse to fund educational activity was through tuition increases, effectively shifting more of the costs to students. In 2008, 31.6% of revenue used to cover public higher education operating expenses came from tuition, compared to 42.4% in 2012. Annual tuition at 4-year public colleges has increased by $1,850, or 27%, since the 2007-08 school year. Compounded over several semesters, the increased tuition adds substantially to the total cost of higher education for an individual and is a primary factor for increased student debt.

**GOVERNMENT ISSUES**

Government regulation of loan eligibility, loan amounts, interest rates, repayment structures, loan deferment eligibility, and government loan forgiveness programs all impact the total cost of student loan debt. Student loan interest rates arguably have the single largest impact on student loan debt. On July 1, 2013, interest rates on certain types of loans doubled because Congress failed to prevent an expiration of subsidies. The federal government, as opposed to the borrower, pays interest accrued on subsidized loans during periods of eligible deferment. This change to subsidized loans had the potential to nearly double the total payment amount of
a loan. However, in August 2013, Congress passed a bipartisan deal to lower interest rates and tie them to market rates. Although this legislation has led to immediate relief for many borrowers, it will not protect future borrowers in a stronger economy when interest rates may rise to as much as 9.5% for graduate and professional students.6

Another factor affecting pharmacy graduates is recent change to federal regulations that no longer require lenders to place student loans into forbearance for a pharmacy residency or fellowship. The new regulation states that only medical and dental residencies qualify for mandatory loan forbearance.7 While this has a smaller effect on student debt, it could cause some pharmacy students to opt out of postgraduate training because of inability to afford or unwillingness to make loan payments.

STUDENT PERSONAL FINANCE AWARENESS AND KNOWLEDGE

Students and their families must accept personal responsibility for aspects of their financial future. While factors pertaining to tuition, salaries, and job prospects are out of their control, students do make choices that affect their education-related debt. Some students engage in lifestyles that significantly exceed their income while in college, purchasing, for example, automobiles, clothing, and electronic devices, and even taking elaborate vacations.8 As a result, student debt extends beyond school-related financial aid to include additional credit card debt. In 2009, a study by Sallie Mae found that 84% of undergraduates have at least one credit card and 50% of undergrads have 4 or more credit cards and use these because they have insufficient savings or financial aid to cover all of their expenditures. Furthermore, 68% of college students have charged items to their credit cards knowing they did not have sufficient funds to pay the bill. The long-term effects of financing these discretionary purchases can result in student loan and credit card debt considerably higher than what is necessary. Most students are aware that this is a problem, with 84% of undergraduate students stating they want more education on financial management topics.9

INCREASED PERSONNEL FOR ADMINISTRATIVE AND TECHNICAL TASKS

Higher education has traditionally been a labor-intensive profession, primarily because of the specialized set of faculty skills and expertise. In recent years, however, the bulk of labor costs have begun to shift away from faculty toward managerial, technical, and support staff.10 In addition to other types of support staff and in part because of the extensive and often redundant governmental, funding agency, and accreditation requirements, institutions and schools now employ large numbers of non–instructional staff members to develop and/or maintain technical systems and to capture, track, record, analyze, and report data (financial, assessment, accreditation, etc.) for accountability purposes. These increases in staff members have been disproportionate to increases in student enrollment.10 In 2007, after adjusting for increased student enrollment, it took 13.1% more employees than it did in 1993 to educate the same number of students.11 While accountability is a necessary and desirable aspect of public institutions, the financial effects of maintaining it are potentially borne, at least partially, by students through rising tuition and fees.

CURRICULAR ISSUES

The time required to earn a degree and the student’s/potential applicant’s ability to earn money throughout an educational career are often important factors for selection of a major. Faculty members set the standards of what, how much, and how in depth the educational process will be throughout the degree program. From a student’s perspective on financing an education, the educational and experiential schedules of pharmacy school may limit their ability to earn income while in school. Furthermore, some curricula seem to focus too much on delivering an increasing amount of content instead of focusing on more selective content paired with better instructional strategies. One of the more difficult questions that pharmacy educators need to ask themselves is: “Can we design effective curricula that is delivered more quickly and/or more efficiently (without sacrificing quality), saving students either money or time?” The higher education landscape is shifting, with more attention to widespread online delivery12 and reconsideration of the credit hour as a metric for student abilities.13 Calls are being made to reduce the cost of medical education14 and pharmacy school administrators should be doing the same for pharmacy education.

Preprofessional requirements have also grown by 525% from 2006 to 2011 in the number of pharmacy programs requiring 3 years of prerequisite courses or a bachelor’s degree, versus 2 years of courses for admittance.15 There is currently no consensus regarding the ideal length or content for prepharmacy curricula.16 While theoretically the more undergraduate work that entering students have completed, the more mature and better equipped they will be for pharmacy school, this potentially comes at the cost of another year of educational expenses and the effective loss of a year’s salary.
ARMED RACE FOR FACILITIES AND RESOURCES

Recent significant expansion of pharmacy education has led to competitive student recruitment based more and more on reputation. Factors that enhance reputation (buildings, technology, student amenities) are all costly, thereby incentivizing an academic “arms race” to see who can spend the most money.\(^1\) Colleges and schools of pharmacy are not immune and are continually seeking every possible edge in attracting the highest quality students. A National Bureau of Economic Research working paper reported that college students place a high value on consumption amenities such as student activities, dormitories, and sports.\(^1\) The recent addition and enhancement of student services to include social, emotional, and career counseling has also accounted for spending growth.\(^19,20\)

Institutional marketing and recruitment strategies now highlight key amenities such as technology, cutting edge pedagogical approaches, and state-of-the-art facilities in order to attract students to their programs.\(^21\) However, even if these amenities are deemed necessary, the price tag associated with new infrastructures, technology implementation, and student services is substantial, driving the cost of an education even higher with little to no evidence that learning is improved. Moreover, higher education might benefit if every institution ceased the expansion of facilities, athletics, and student amenities. Unfortunately, market forces perpetuate continued escalation, and no institution can unilaterally withdraw from this arms race without putting itself at risk of falling behind.\(^22\)

RECOMMENDATIONS

A Center for College Affordability policy paper has been released that offers systemic methods universities can use to make education more affordable (such as reforming financial aid, digitizing academic libraries, and streamlining redundant programs) and reverse the trend of rising costs.\(^17\) We offer some additional recommendations for the academy to consider.

While public funding of higher education will not likely revert completely to previous levels, the academy must continue to lobby for federal and state support. Without pressure, state and federal legislatures may reduce financial allocations even further. Additionally, lobbying efforts should be directed toward securing adequate financial aid funding for students, particularly grants and low interest loans.

As mentioned previously, many students today struggle with increased loan balances and significant debt related to unwise personal financial management. Many colleges and schools of pharmacy offer personal finance courses\(^23,24\) or provide brief financial management principles to students prior to graduation, but some students may already be deep in debt before those lessons are taught. We propose 5 recommendations that the academy could employ to minimize this problem.

1. Integrate required financial management coursework into the curriculum. This coursework needs to be employed early (preferably within the first year of the doctor of pharmacy program) so that the principles can be employed throughout the student’s educational career. Curriculum should focus on designing and living within a budget, avoiding unnecessary debt and overuse of credit cards, managing financial aid in a responsible manner, and obtaining financial advice for postgraduate loan repayment, insurance coverage, and timing of large purchases.

2. Designate an appropriate faculty/staff member or external expert to provide ongoing financial counseling to students throughout their educational career. Access to financial aid offices varies among college campuses, and even in the best of scenarios, those services may lack the scope of counseling that students need related to financial management. A designated counselor who can build a level of trust with students might encourage a more open line of communication with and a more receptive response from students.

3. Inform all students of the Federal Student Loan Forgiveness Program, which forgives student debt after a period of service. To qualify for the program, students must work for a public institution for 10 years (nonconsecutive) and make 10 years’ worth of qualifying payments. All remaining student debt will be forgiven after the 10 years.\(^25\) Pharmacist who take advantage of this program can potentially reduce their student debt by tens of thousands of dollars.

4. Encourage national pharmacy organizations to provide financial management programming at association meetings that student pharmacists attend. Programming should include student-to-student teaching and best practices (ie, roundtable discussions), allowing students to share what has worked as well as mistakes to avoid.

5. Encourage administrators at colleges and schools of pharmacy to assess their institution to ensure that students are not overburdened by the cost of their education. This might necessitate scrutiny of tuition models and internal operations to determine if students are paying only their fair share. At the university level, use of technology should be explored to reduce staff numbers and time necessary
to comply with accreditation and other accountability demands. Extracurricular amenities should be closely scrutinized and avoided if they result in additional costs to students without providing added value to their professional education. Additionally, the curriculum (including prepharmacy) should be analyzed to determine if students are loaded with coursework that adds little value to their overall degree and their ability to practice pharmacy. This type of scrutiny may be a painful process for faculty members, but it could result in a much more streamlined and effective curriculum. While fraught with numerous issues, there are also intriguing possibilities for collaboration within the academy with regard to sharing educational content online. We encourage the American Association of Colleges of Pharmacy to explore potential content sharing mechanisms that create pedagogical efficiencies. Pharmacy educators have the responsibility as faculty members of not acting out of self-interest, but in providing the best and most economical education to students.

REFERENCES