

# Help Wanted: Commentary on Trends in the Pharmacist Workforce and Pharmacy Education

Lisa Lebovitz, JD; Natalie D. Eddington, PhD  
University of Maryland School of Pharmacy

## Objective

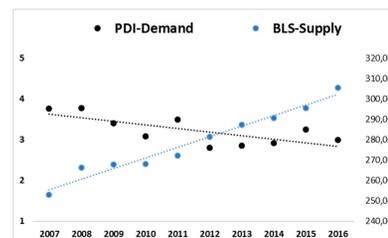
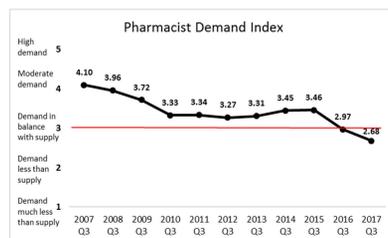
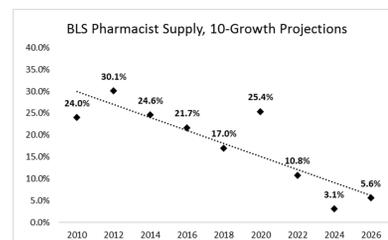
The objective of this project was to observe longitudinal trends in national data on the pharmacist workforce and pharmacy education.

## Commentary

The supply of pharmacists in the workforce is rapidly exceeding demand as retail chains are consolidating and reducing labor costs, while pharmacy schools continue to open and expand enrollment, setting up a “perfect storm” of too few jobs for all of the graduates from more than 140 schools of pharmacy.

*Someone should do something, but who bears responsibility to take action? We all do.*

Pharmacy associations have been calling for transformation of the profession by advocating for provider status and prioritizing interprofessional education and practice, and must continue to focus on demonstrating this value to employers. Accreditation exists for protection of the consumer (student) and the public, and standards have driven educational changes to ensure that pharmacy students are highly trained and prepared for this transformation. Pharmacy colleges and schools have responded to the accreditation requirements, but generally seem to be overlooking the supply and demand data. Employers, particularly retail pharmacies where the majority of pharmacy graduates are employed, are singularly focused on a fee for service business model and little if any “transformation” is evident there.



## Data Trends

The US Bureau of Labor Statistics (BLS) data shows that trends in projected growth of the pharmacist profession have *rapidly shifted from severe shortage to imminent surplus*:

- In 2006, BLS projected 10-year growth of 21.7% from 243,000 to 296,000 pharmacists by 2016, *more than double* the national employment growth projection of 10.4%.
- In 2016, BLS projected 10-year growth of 5.6% from 312,500 to 330,100 pharmacists by 2026, which is 25% *below* the national employment growth projection of 7.4%.

### HRSA Reports on Pharmacist Workforce:

- In 2000, HRSA predicted growth from 196,000 to 224,500 between 2000-2010, but projection was almost immediately surpassed according to BLS data of 230,000 practicing pharmacists in 2002.
- In 2014, HRSA's new analysis predicted a worrisome oversupply of 48,900 pharmacists by 2025, with supply of 355,300 and demand of 306,400. This projected demand was surpassed before the ink was barely dry, according to BLS data of 312,500 practicing pharmacists in 2016.
- The 2000 HRSA report also mentions a 1998 BLS finding that 60% of pharmacist positions were in retail and about 29% in health care institutions. Almost 20 years later, BLS data reflect an identical distribution between the two practice settings.

**Demand for other health professions is far outpacing pharmacy.** BLS 2016 10-year growth projections range from 10% for podiatrists, to 13% for physicians and surgeons, to 19% for dentists. Far greater growth is projected for other health care professionals with comparable education/training: physician assistants (PAs) (37%) and nurse practitioners (NPs) (36%).

**Pharmacist salary growth is stagnant.** Over the last 10 years, the year-to-year increase in pharmacists' median annual salary has shrunk from 3-6% between 2007 and 2011 to 1-2% between 2012 and 2016, without adjusting for inflation. BLS also reported that about 20% of pharmacists (1 in 5) worked part-time in 2016. Of note, median salaries for high-growth professions of PAs and NPs are 20-30% *lower* than pharmacists.

The **Pharmacist Demand Indicator (PDI)** reflects the slow and steady decline from shortage to surplus, as do **national pharmacist workforce surveys**. A 2000 report extolled that demand was much greater than supply, leading to “drastic” wage increases and signing bonuses. By 2014, however, a continued and increased trend in labor reductions or workforce adjustments was evident compared to the 2009 report. Restructuring of pharmacist work schedules to save labor costs was reported by 35% of pharmacist respondents (compared to 26% in 2009); 17% reported mandatory reductions in pharmacist hours (13% in 2009), 9% reported pharmacist layoffs (6% in 2009), and 6% reported early retirement incentives for pharmacists (4% in 2009).

**NABP 2017 report on E-Profile aggregate data** negates the optimistic assertion that baby boomer retirements will balance out the oversupply. Of those reporting in their E-Profiles,

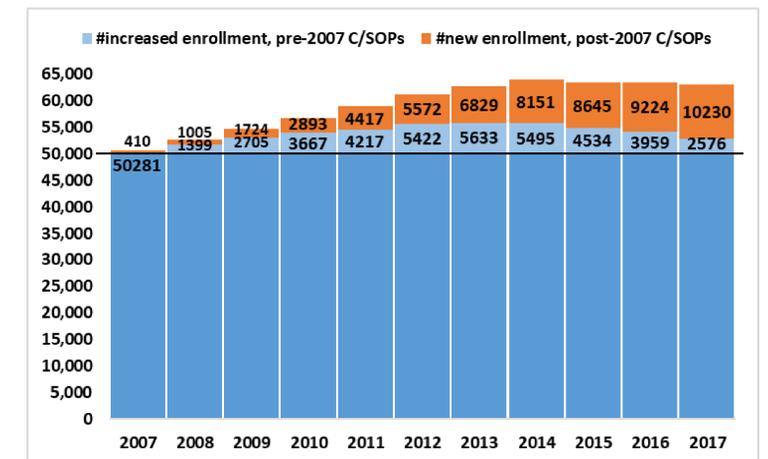
- 73% (n=327,555) were born in 1960 or later; i.e. age 57 or younger
- 68% (n=215,820) held a PharmD degree, and 86% indicated graduating after 1/1/1990

### PharmD student debt is skyrocketing (AACP Graduating Student Survey)

- In 2012, ~8,700 PharmD grads (110 C/SOPs) reported the average amount borrowed to finance their pharmacy education was ~~\$123,063~~ (\$103,829 for graduates of public institutions and \$142,849 for graduates of private institutions).
- In 2017, ~11,000 grads (131 C/SOPs) reported an average amount borrowed of ~~\$163,494~~ (\$136,328 for graduates of public institutions and \$189,317 for graduates of private institutions). *Average debt increased by 33% over the last five years.*

**C/SOP growth continues unabated**, despite the economic data and cautionary statements from thought leaders predicting oversupply without immediate actions.

- 143 C/SOPs (132 accredited, 7 in candidate status, and 4 in pre-candidate status)
- C/SOPs established before 2007 have decreased enrollments to 2008-09 levels.
- At current rates, C/SOPs will graduate ~145,000 more pharmacists in 10 years.**



## Conclusions

All C/SOPs must take immediate action to reduce class size, and ACPE's mission of ensuring the overall quality of pharmacy education is critical here. Although cutting enrollment can be politically and financially challenging, downstream costs of focusing on quantity are already being felt. For faculty, this is decreased morale from having to do more with less and increased workload from remediation of weak students. For students, this is a negative impact on wellbeing due to not meeting threshold progression indicators and increasing debt and worry about competing for a job in the traditional marketplace.

AACP must catalyze the transformation of the profession right now. Continue to lead and partner with the other pharmacy associations, angel investors, and retail employers to demonstrate proof of concept for new revenue streams. Capitalize on the public trust of pharmacists with innovative business models that prove the value of social entrepreneurship to providers and legislators.