



Pharmacy Enrollment and Workforce Trends: Crisis or Opportunity?

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#SheWaited #Piz is not working

- Cons of being a pharmacist, Indeed Career Guide, March 10, 2023
- <https://www.indeed.com/career-advice/finding-a-job/and-cons-of-being-pharmacist>

- Extended schooling
- Competitive field
- Limited career advancement
- Physical Fatigue
- Underappreciated work
- High-Pressure work





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Objectives

- Present past and current data regarding:
 - Pharmacy workforce trends
 - Pharmacy Application and Enrollment trends
- Discuss perceptions of the profession across stakeholders
- Consider approaches to enrollment and workforce challenges
- Discuss student recruitment, balancing supply and demand and improving work conditions

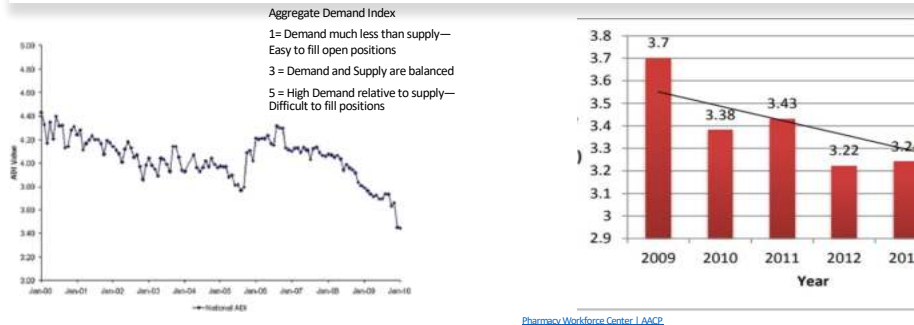


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Pharmacy Workforce Data

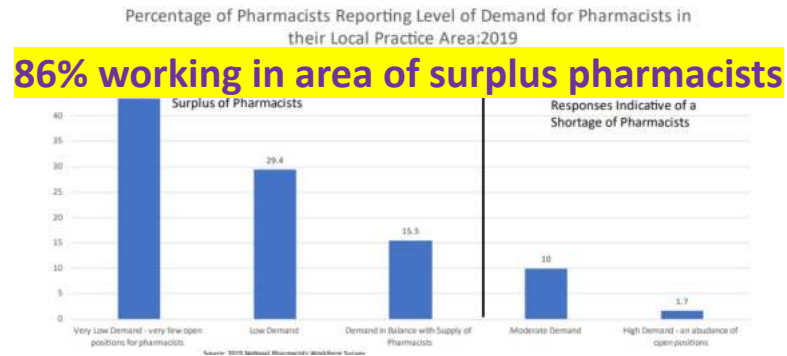
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Pharmacist Aggregate Demand Index: 2000 - 2014



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National Pharmacist Workforce Survey: 2019



[2019 NPWS Executive Summary.pdf \(aacpc.org\)](#)

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Pharmacist Demand Report: Postings by type of position, 2020-2022

Position	2020	2022	Percent change
Retail Pharmacist	23,132	41,484	79%
Hospital Pharmacist	2,192	3502	60%
Other Pharmacist Occupation	4,933	7,425	51%
Pharmacy Director	2390	3339	40%
Clinical Pharmacist	10,362	13,303	28%
Pharmacy Technician	119,968	153,715	28%

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BLS Occupational Outlook Handbook: Pharmacists (Feb 2023)

Pharmacists

Summary What They Do Work Environment How to Become One Pay Job Outlook State & Area Data Similar Occupations More Info

Summary

Quick Facts: Pharmacists	
2022 Median Pay	\$126,578 per year \$61.42 per hour
Typical Entry-Level Education	Doctoral or professional degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2022	322,506
Job Outlook, 2022-31	2% (Slower than average)
Employment Change, 2022-31	7,700



What Pharmacists Do
Pharmacists dispense prescription medications and provide information to patients about the drugs and their use.

Work Environment
Pharmacists work in pharmacies, including those in drug, general merchandise, and grocery stores. They also work in hospitals and other healthcare facilities that are open 24 hours. Most pharmacists work full time, and some work nights, weekends, and holidays.

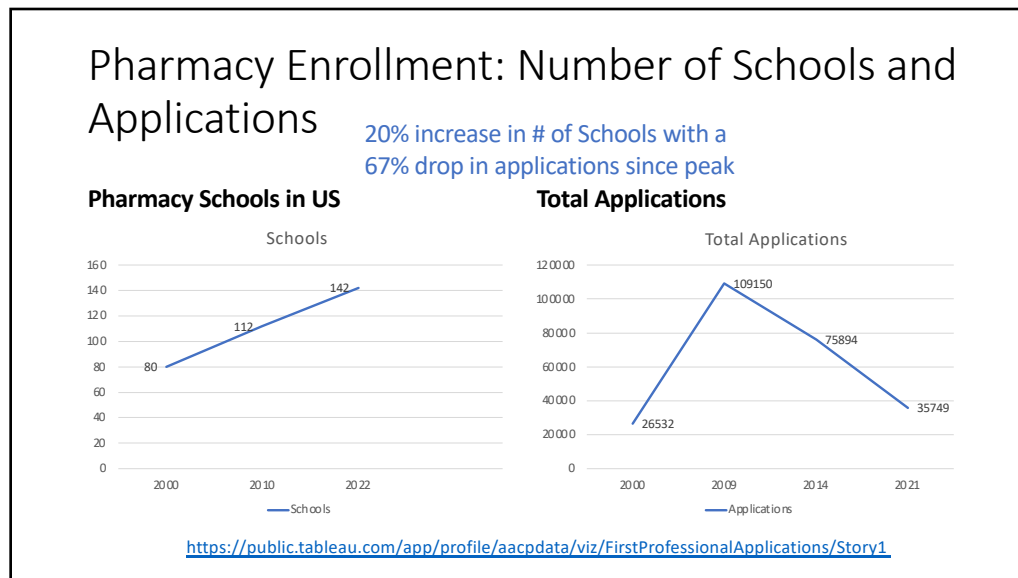
[Pharmacists : Occupational Outlook Handbook : U.S. Bureau of Labor Statistics \(bls.gov\)](https://www.bls.gov/occupational-outlook-handbook/2023/02/pharmacists)

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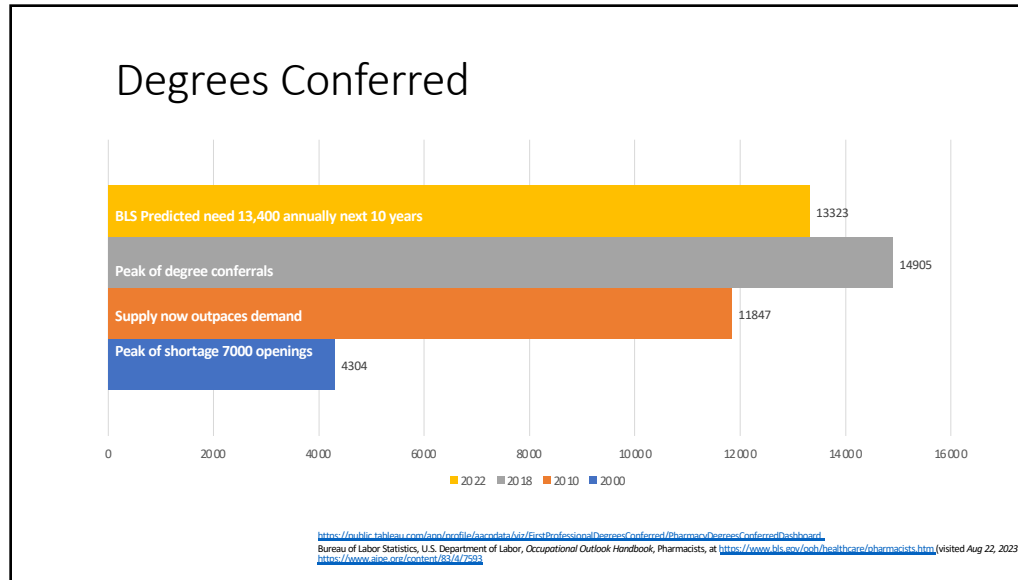
Pharmacy Enrollment

A Story of Unprecedented Expansion

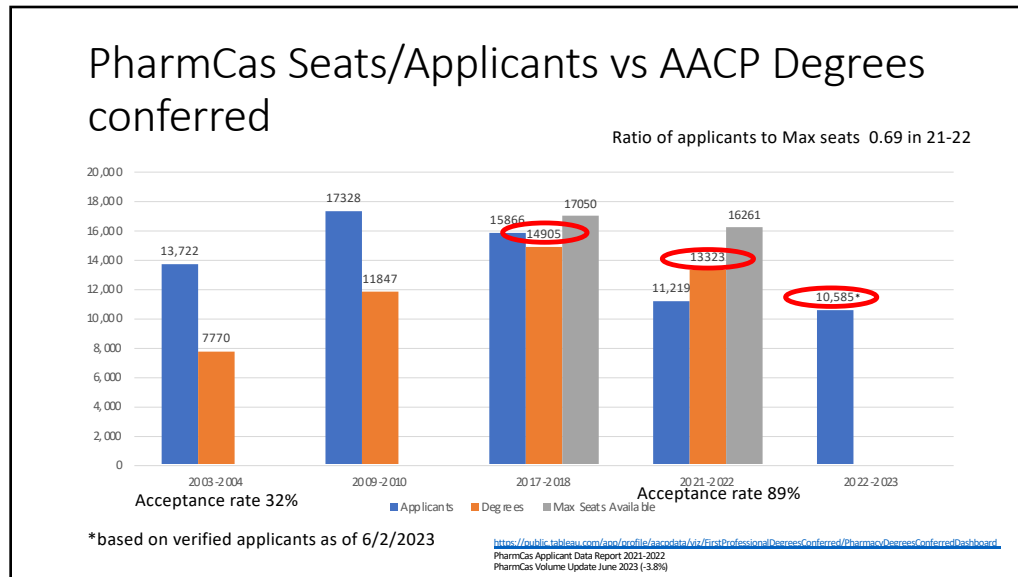
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District IV Enrollment Data

PharmCAS Volume by School Type and District
June 2, 2022 vs. June 2, 2023

PharmCAS Programs for 2021-22 & 2022-23	Mean # of Applicants Per Program 6/2/2022	Mean # of Applicants Per Program 6/2/2023	Mean % Change Per Program to Date	Range Per Program to Date		% of Programs with Increase in Applicants to Date	% of Programs with Decrease in Applicants to Date	% of Programs with No Change in Applicants to Date	Median # of Applicants Per Program 6/2/2022	Median # of Applicants Per Program 6/2/2023	Range in # of Applicants Per Program 6/2/2022 - 6/2/2023				Total # of Applicants for Group of Programs 6/2/2023
				MIN	MAX						MIN	MAX	MIN	MAX	
				All	236.2						224.7	-4.9%	-38%	119%	
Public	251.4	240.8	-4.2%	-38%	50%	28.8%	71.2%	0.0%	214	209	49	624	47	589	15850
Private	222.1	209.8	-5.5%	-36%	119%	13.8%	64.8%	1.4%	199	185	29	693	57	697	14899
Districts 1 & 2	216.1	214.0	-1.0%	-31%	97%	35.2%	61.8%	2.9%	194	195	29	539	47	471	7276
District 3	253.8	250.7	-1.2%	-23%	90%	13.3%	66.7%	0.0%	211	207	53	693	65	697	7520
District 4	233.7	221.0	-5.4%	144%	119%	31.8%	68.2%	0.0%	229	189	37	519	72	452	4863
Districts 5, 6, 7	218.6	207.7	-5.0%	-88%	71%	17.0%	62.1%	0.0%	170	169	63	502	67	441	6024
District 8	269.1	232.1	-13.8%	-96%	14%	13.8%	86.4%	0.0%	246	208	34	507	60	402	5106

Programs new or no longer in PharmCAS in 2022-2023 are excluded. Table reflects applicants with Submitted status. Mean percent change was calculated using the overall mean number of applicants in the 2nd (2021-22) column and 3rd (2022-23) column of this table. One applicant may be represented in multiple groups. Table reflects program data as of June 2 in each cycle. Districts reflect geographic regions and were created by the National Association of Boards of Pharmacy (NABP). Some district data was combined to ensure there were at least 20 programs per group. Final 2022-2023 data will be available in fall 2023.

- DISTRICT 1: Connecticut, Maine, Massachusetts, New Brunswick, Newfoundland, New Hampshire, Nova Scotia, Quebec, Rhode Island, Vermont
- DISTRICT 2: Delaware, District of Columbia, Maryland, New Jersey, New York, Ontario, Pennsylvania, Prince Edward Island, Virginia, and West Virginia
- DISTRICT 3: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, and the Virgin Islands
- DISTRICT 4: Australia, Bahamas, Belize, Illinois, Indiana, Michigan, Ohio, and Wisconsin
- DISTRICT 5: Iowa, Manitoba, Minnesota, Nebraska, North Dakota, Saskatchewan, and South Dakota
- DISTRICT 6: Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas
- DISTRICT 7: Alaska, Alberta, British Columbia, Idaho, Montana, Oregon, Washington, and Wyoming
- DISTRICT 8: Arizona, California, Colorado, Guam, Hawaii, Nevada, New Mexico, and Utah

3 Preliminary data provided by the American Association of Colleges of Pharmacy (June 2023)

Perceptions of Pharmacy as a Career

National Pharmacists Workforce Survey 2022

- 14.9% of pharmacists experienced an employment status change since March 2020 that resulted in unemployment for a period of time
- Unemployed at time of survey
 - 4.9% (2019) vs. 2.9% (2022)
- Unemployment voluntary
 - 38.9% (2019) vs. 65.7% (2022)
- Job Satisfaction
 - 26% of respondents indicated they are “happy at work”
 - 36% of respondents reported they would likely search for a different job in the next year

[2022-npws-final-report.pdf \(aacp.org\)](#)

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National Pharmacists Workforce Survey 2022

- Pharmacy Technician Shortage is Severe
 - 80% of chain pharmacist respondents
 - 70% of hospital inpatient pharmacists
- 80% of those who perceive a tech shortage agreed that:
 - Technicians unhappy due to being overworked
 - Pharmacists are unhappy with their jobs
 - Pharmacists spend too much time in dispensing activities
 - Patient safety/quality of care was compromised by tech shortage

[2022-npws-final-report.pdf \(aacp.org\)](#)

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National Pharmacists Workforce Survey 2022

- Insufficient time to safely care for patients
- Not enough pharmacists
- Payment does not support clinical duties
- Pharmacy hours shortened due to address staffing issues, results in increased pressure on staff
- Not a shortage of pharmacists and technicians, but there is a shortage of those willing to work under current conditions

[2022-npws-final-report.pdf \(aacp.org\)](#)

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PTCB 2022 Pharmacy Technician Workforce Survey

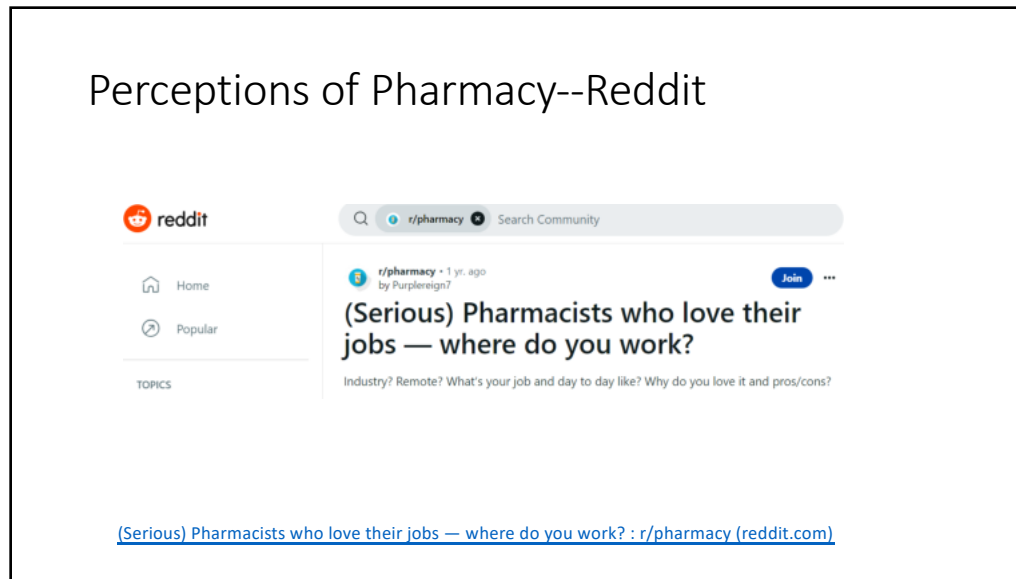
- Survey conducted by email in May 2022
- 20,000 respondents (5% response rate)
- Included certified and non-certified pharmacy technicians
- 60% report a significant increase in workload due to pandemic (COVID-19 testing and vaccinations)
- 44% attributed technician resignations to lack of career ladder/advancement is a top priority

[Workforce Shortages Present Serious Challenges \(pharmacytimes.com\)](#)

[PTCB Releases 2022 Pharmacy Technician Workforce Survey Results - News](#)

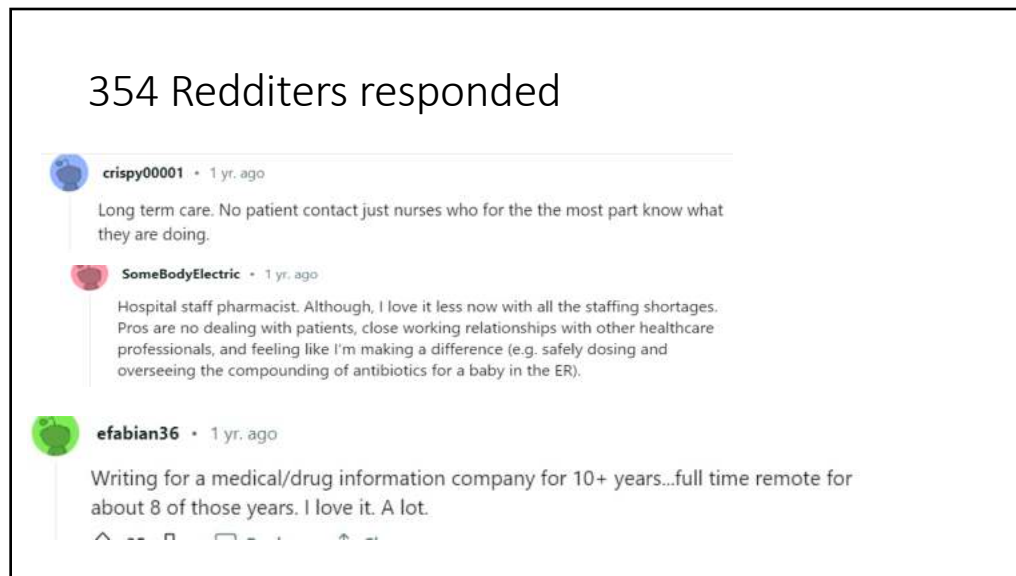
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Perceptions of Pharmacy--Reddit




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354 Redditors responded




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 **ragingseaturtle** · 1 yr. ago
Clinic. We do minimal scripts and mostly assist with doctors making recommendation and PAs. It's lovely. If I didn't have this job I wouldn't be in pharmacy anymore.
👍 26 🗨️ Reply 📄 Share ⋮


⊕ 2 more replies

 **jql828** · 1 yr. ago
Retail. CVS (yes cvs) inside Target. The people we get are much nicer, patient, no drive thru and not as busy as a regular stand alone CVS. I rarely hear from my DL and have the time to give our patients and students great care and education.


 **timtom178** · 1 yr. ago
I am a medical cannabis pharmacist. I believe they only exist in two states. Very new to it, but I love it.

Edit: apparently a thing in more than two states
👍 167 🗨️ Reply 📄 Share ⋮


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 **Timster13** · 1 yr. ago
Specialty mail order pharmacist working from home
👍 54 🗨️ Reply 📄 Share ⋮


⊕ 2 more replies

 **Downtown_Click_6361** · 1 yr. ago
Psych pharmacist inpatient. Love the culture with my coworkers and being able to interact with patients daily.
👍 51 🗨️ Reply 📄 Share ⋮



⊕ 10 more replies

 **holyherbiness** · 1 yr. ago
Outpatient pharmacist at an outpatient oncology center. Love patient interactions and their surprisingly positive outlook on life
👍 27 🗨️ Reply 📄 Share ⋮


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 **DoserBikerGypsy** • 1 yr. ago

Completing an industry fellowship right now and loving it. All project based work and WFH for the most part so while I'm technically 9-5 I basically just make sure I get my to do list done every day to stay on schedule for projects. It's also nice when I hit a wall during the day I can just hop on my Xbox for 30 minutes or take the dog on a walk to get refocused. Compared to my friends in residency I have a way better work life balance already. Looking like I might have a couple weeks of 40+ hours coming up but before and after that span is a lot of down time.

↑ 21 ↓  Reply  Share ...

⊕ 4 more replies

 **theHPIC** • 1 yr. ago


Ambulatory care type pharmacist for a health system owned by the physicians. Appointments by referral for polypharmacy, med reconciliation, adherence, financial assistance.

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 **rgcpantner** • 1 yr. ago

I LOVELOVELOVE being a pharmacist. I am a community retail pharmacist and have been since 1994. I LOVE my patients. I can make a difference in their lives. I know my patients' favorite sports teams, I know their families, I ask about their children. I want to erase any of their fears of myself so that they can come to me in the event of a family emergency. They can ask questions and talk to me.

I had a patient just a month ago who said to me, "Thank you for being my pharmacist." Folks, that's what it's all about...

↑ 12 ↓  Reply  Share ...

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BLS Occupational Outlook Handbook: Select Healthcare Careers

Job Title	Degree	Number Jobs	Open positions/year	Projected Increase (%)	Median Wage
Pharmacist	Doctoral/prof	323,500	13,600	7700 (2%)	\$128,570
Physician/ Surgeon	Doctoral (MD/DO)	761,700	23,800	21,400 (3%)	≥\$208,000
Registered Nurse	BSN	3,130,600	203,200	195,400 (6%)	\$77,600
Physical Therapist	Doctoral/prof	238,800	15,400	40,400 (17%)	\$95,620
Physician's Assistant	Master's	139,400	12,700	38,400 (28%)	\$121,530

[Home : Occupational Outlook Handbook: : U.S. Bureau of Labor Statistics \(bls.gov\)](https://www.bls.gov/)

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BLS: Work Environment

- Registered Nurses work in hospitals, physician's offices, home health care services and nursing care facilities. Some work in outpatient clinics and schools.
- Physician's Assistants work in physician's offices, hospitals, outpatient clinics and other healthcare settings. Most work full time.
- Physicians and Surgeons typically work in clinical and nonclinical settings. Clinical settings include physician's offices and hospitals. Nonclinical settings include government agencies, nonprofit organizations and insurance companies.
- **Pharmacists work in pharmacies including those in drug, general merchandise, and grocery stores. They also work in hospitals and other health care facilities that are open 24 hours. Most pharmacists work full time and some work nights weekends and holidays.**

[Home : Occupational Outlook Handbook: : U.S. Bureau of Labor Statistics \(bls.gov\)](https://www.bls.gov/)

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Public Perception

- Numerous articles about retail pharmacy
- Focus on
 - Reduced wages
 - Reduced staffing/increased stress/errors
 - Increased workload due to COVID-19
 - Pharmacists who have left jobs at retail chains

Pharmacist Shortage Is Becoming More Acute — Is There a Way Out?

Have you experienced long lines when trying to pick up prescriptions? The COVID-19 pandemic has impacted the pharmaceutical industry. There's a pharmacist shortage in 2022.

BY ANURADHA GARG
AUG. 31 2022, UPDATED 10:57 A.M. ET



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Student Perceptions

- High cost of tuition/student loan burden
- Poor job outlook/dissatisfying career options



<https://forums.studentdoctor.net/threads/dont-do-pharmacy-school-its-a-scam.1452812/>

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Efforts to Mitigate Enrollment Challenges

Recruitment, Retention, Success

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Current Recruiting Efforts

- Affiliation Agreements
- Recruiting in MS/HS to raise awareness
- Pharmacy Is Right 4 me
- Soliciting applicants from other health science programs
- Highlighting career options/salary
- Discounting/Tuition Guarantee/Tuition reduction

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Focus on **student retention and success** because we can't realistically recruit our way out of the applicant shortage in the near future!!

AJPE 2023,87 (3) Article 9116 accessed 9/6

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Mental Health, Learning Support, Accommodations and Remediation Programs are a Must Have

Examples:

- Remediation: challenge exams, remedial courses
- Support: Faculty trained in Mental Health First Aid, connecting students with disability services, accommodations, referral to counseling, offer tutoring and peer mentors, offer assistance with time management, organization, study habits, test taking skills
- Look at your progression policies—are they supportive or punitive?
 - Students dismissed can negatively impact admission efforts (social media), their fellow classmates and faculty
- Develop an individualized progression plan so students can successfully complete their degree

Workload is increased to support fewer students

<https://www.pharmatimes.com/news/health-care/rapid-growth-of-institutions-pharmacy-school-applications-decline>, Accessed 8/23

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Rethink Metrics Used for Pharmacy Program Success

- Attrition Rates
 - Is it more important to be on-time vs successfully complete the degree?
- NAPLEX Pass rates
 - Is it more important to pass the 1st time vs successfully passing ever?
- Successful Licensure
 - Some careers do not require NAPLEX pass/Licensure
- Job Placement rates in Pharmacy 1 year out
 - Students may take longer to pass NAPLEX
 - May pursue an alternative career that their Pharm D has also prepared them for

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Employer Efforts toward Recruiting and Retention

- Community Residency programs
- Compensation
- Investment in pharmacy schools
- Investment in technology to support pharmacy operations
- Redefining community pharmacy practice
- Training for pharmacy team

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Discussion

Student Recruitment

- What are some examples of negative perceptions that students might have about the profession that can serve as a barrier?
- What are examples of some solutions that can shift those perceptions?
- How can people in this room help with these solutions?

Balancing pharmacist supply with demand

- Who is responsible for ensuring we have the right number of pharmacists? How can we avoid going back to the crisis of a pharmacist surplus in 2019?

Improving working conditions

- How will community pharmacy respond to constraints of reimbursement issues, low staffing, and high workloads?
- What can be done to improve safety and reduce stress on pharmacists and technicians?