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Current State of Community Pharmacies

Delesha Carpenter, PhD, MSPH

Professor and Executive Vice Chair

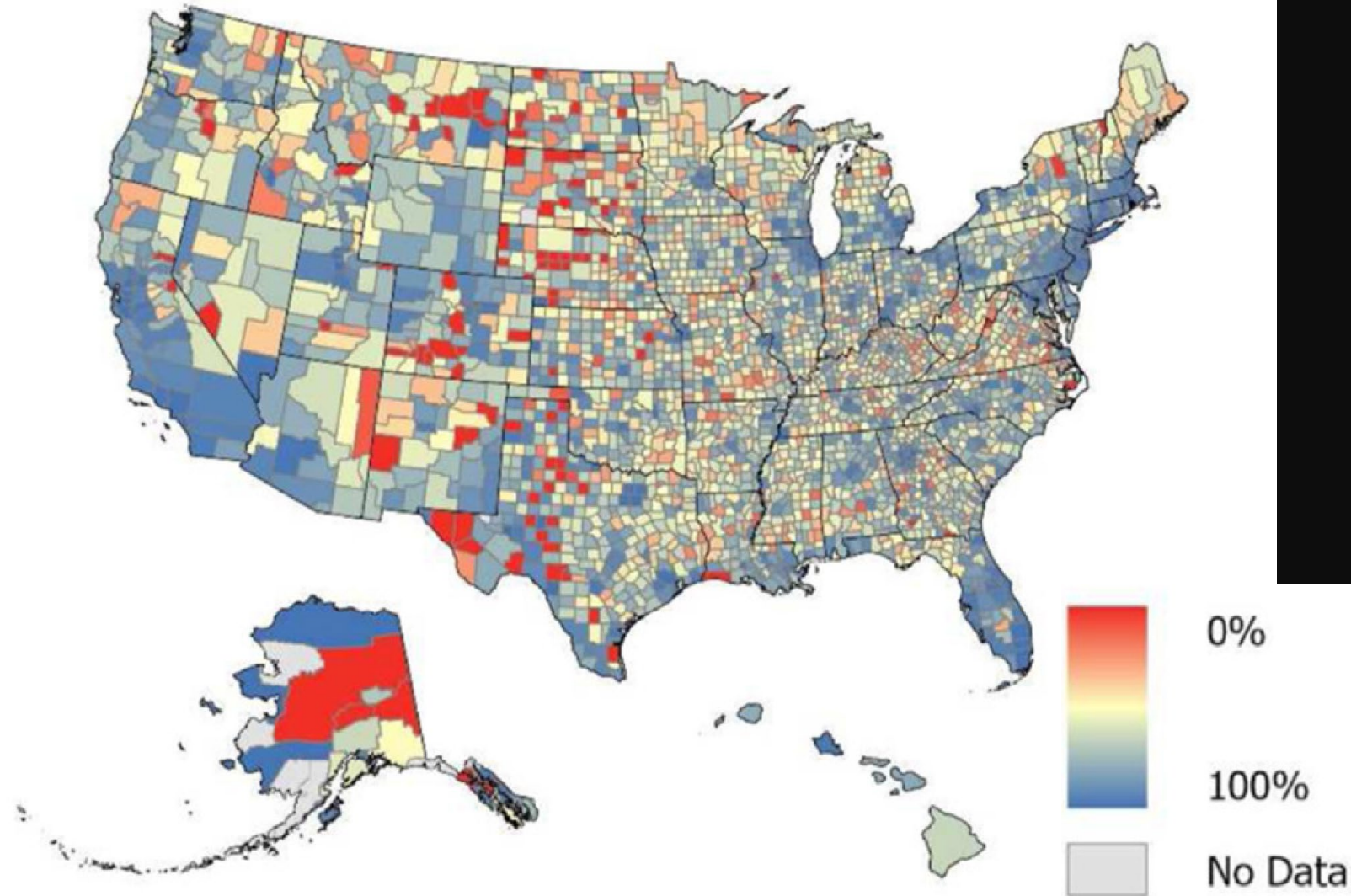
Division of Pharmaceutical Outcomes
and Policy





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Proportion of Population Within 5 Miles

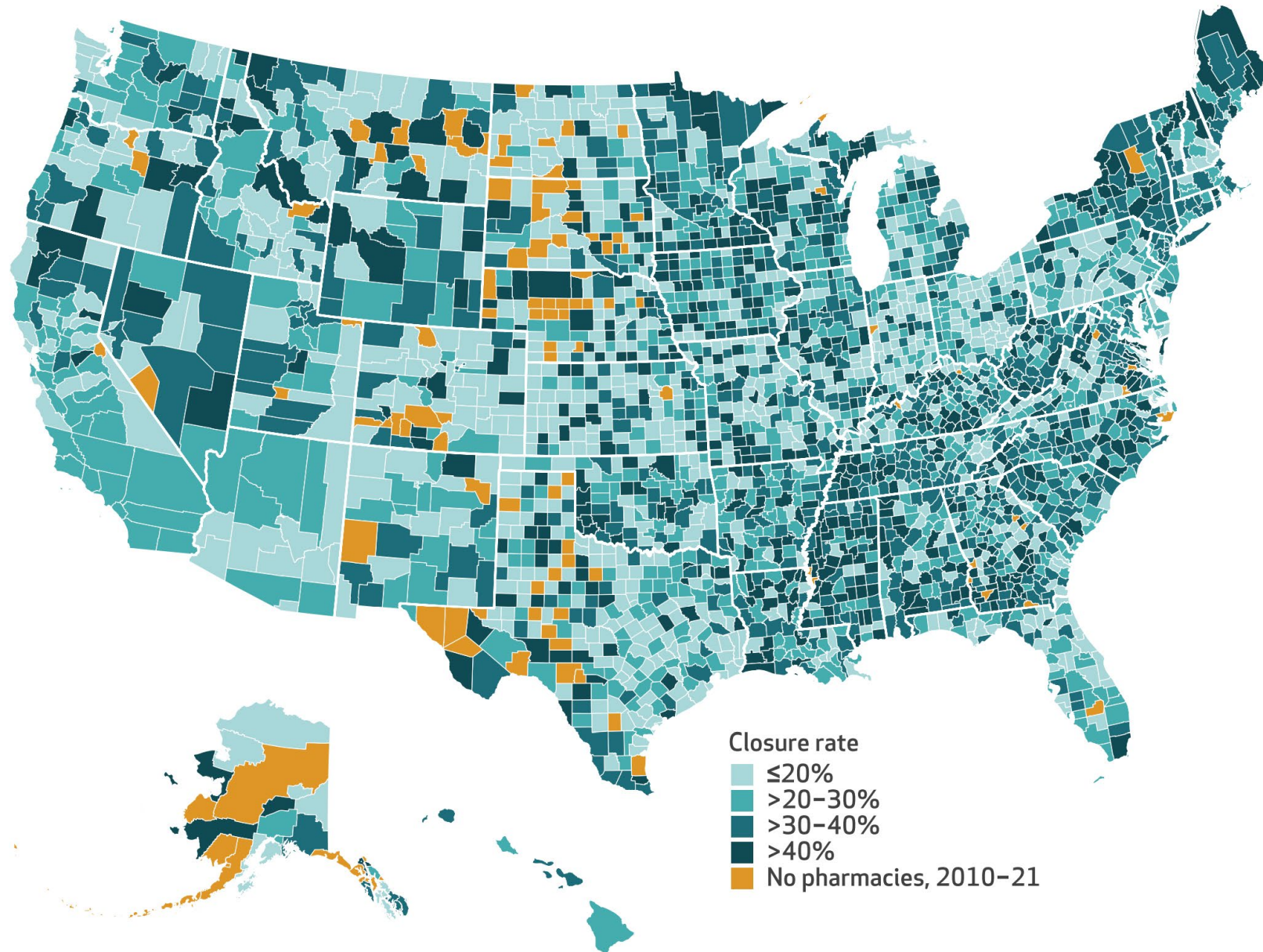


89% of the
population
lives within 5
miles of a
pharmacy



Berenbrok et al (2022). Access to community pharmacies: A nationwide geographic information systems cross-sectional analysis. *Journal of the American Pharmacists Association*, 62(6), 1816-1822.

Pharmacy closure rates in the US, by county, 2010–21



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Closures

Independent
pharmacies

Black and
Latinx
neighborhoods

Low-income
urban
neighborhoods

Guadamuz et al (2024). More US Pharmacies Closed Than Opened In 2018–2021.... *Health Affairs*, 43(12), 1703-1711.



Desert vs Keystone

Pharmacy Desert

- Geographic area with low access to pharmacies
- Can be defined by driving distance, driving time, other metrics

57.1 million
(17.7%) live in pharmacy
desert census tract

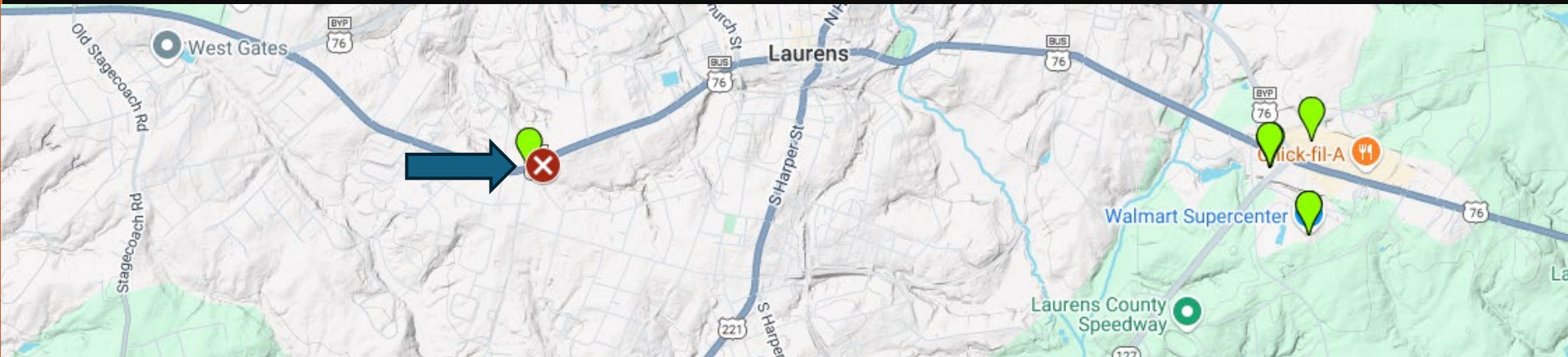
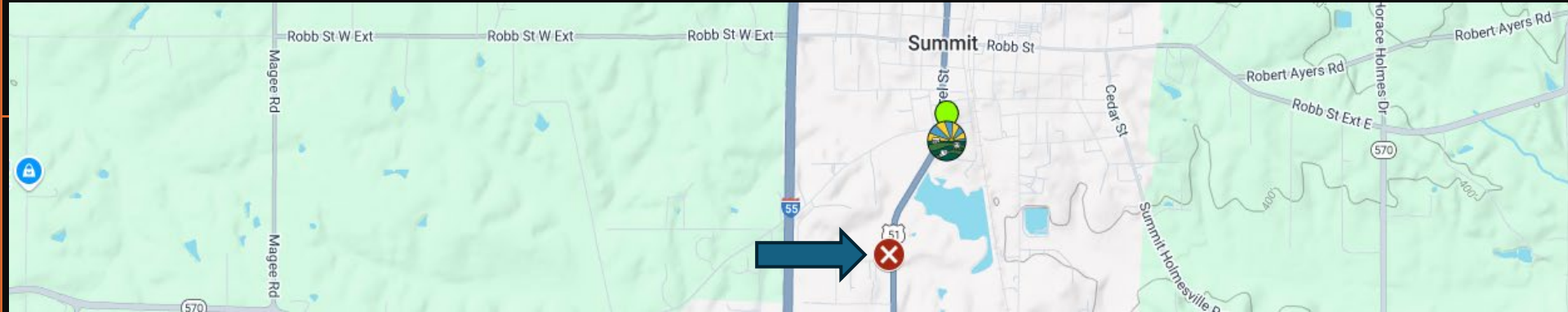
Keystone Pharmacy

- Critical pharmacy locations that would create a pharmacy desert if they closed
- Priority to keep open

28.9 million
(8.9%) live in keystone
pharmacy census tract



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RURAL-CP
Rural Research Alliance of
Community Pharmacies



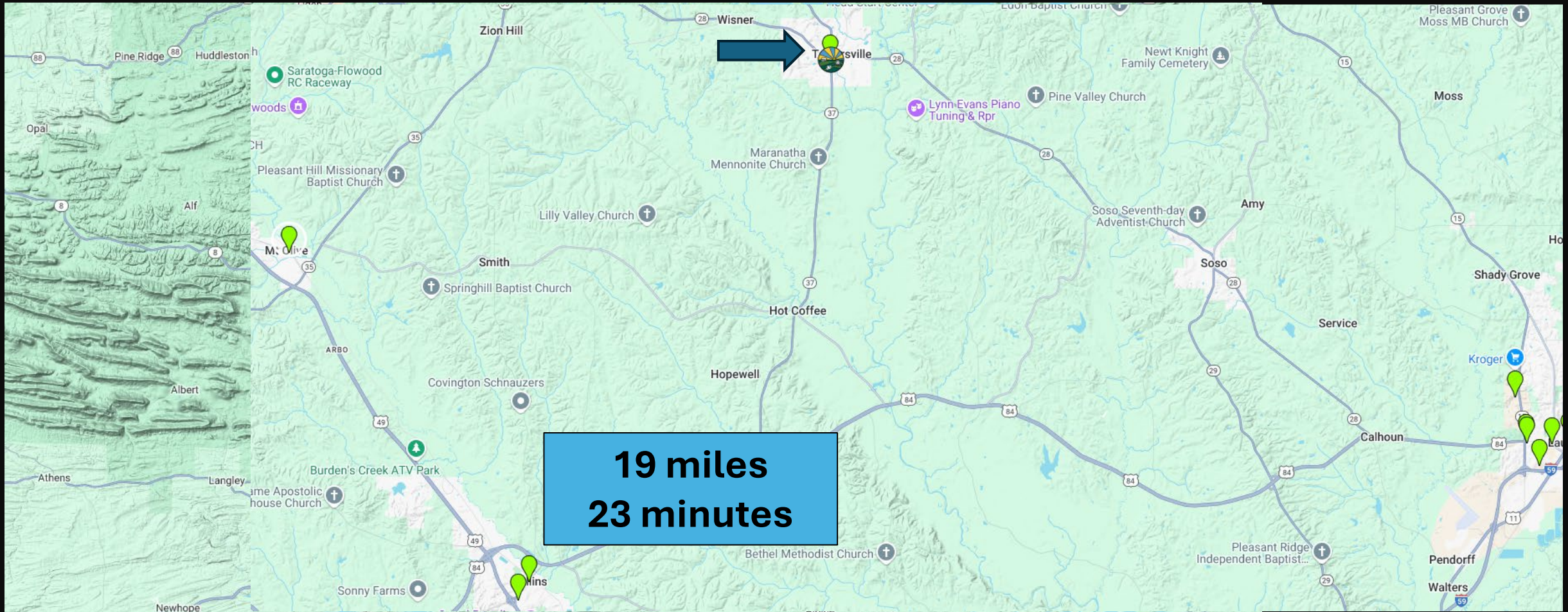
155
pharmacies

ruralcp.web.unc.edu



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Examples of Keystone Pharmacies



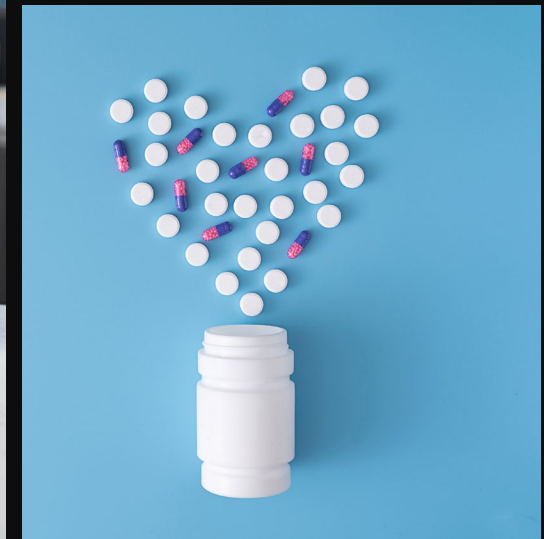


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Impact on Communities

Decreased:

- medication adherence
- vaccinations
- access to medications, devices, and OTC products
- ability to consult pharmacists
- employment opportunities



Qato et al (2019). Association between pharmacy closures and adherence to cardiovascular medications among older US adults. *JAMA Network Open*, 2(4), e192606-e192606.



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Impact on Patients



**Medication
delivery**

**Management
of
complicated
medication
regimens**





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RURAL-CP
Rural Research Alliance of
Community Pharmacies

RURAL-CP Example

	Vaccines	Naloxone Dispensing	Covid/ Strep/Flu testing	Transitions of Care	Med Delivery	Med Sync	Glucose testing
Closed (n=3)	66%	66%	0	33%	33%	33%	0
Keystone (n=2)	100%	50%	50%	0	100%	100%	50%
All RURAL-CP (n=126)	91%	71%	19%	6%	79%	90%	37%

Carpenter et al (2024). An implementation science focused practice-based research network for rural community pharmacies: RURAL-CP. *Clinical and Translational Science*, 17(2), e13725.



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Impact on Training

Decreased:

- Student experiential rotations
- Student exposure to pharmacies serving high-need communities
- Pipeline for pharmacists to eventually work in these communities





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RURAL-CP
Rural Research Alliance of
Community Pharmacies

RURAL-CP Example

	Included students	IPPEs	APPEs	Part-time employees
Closed (n=3)	66%	66%	66% (12 total)	0
Keystone (n=2)	50%	0	0	50% (2 total)
All RURAL-CP (n=126)	62%	37%	37%	10%

Students involved in workflow dispensing and starting/improving/delivering clinical services

Carpenter et al (2024). An implementation science focused practice-based research network for rural community pharmacies: RURAL-CP. *Clinical and Translational Science*, 17(2), e13725.

Closure Maps



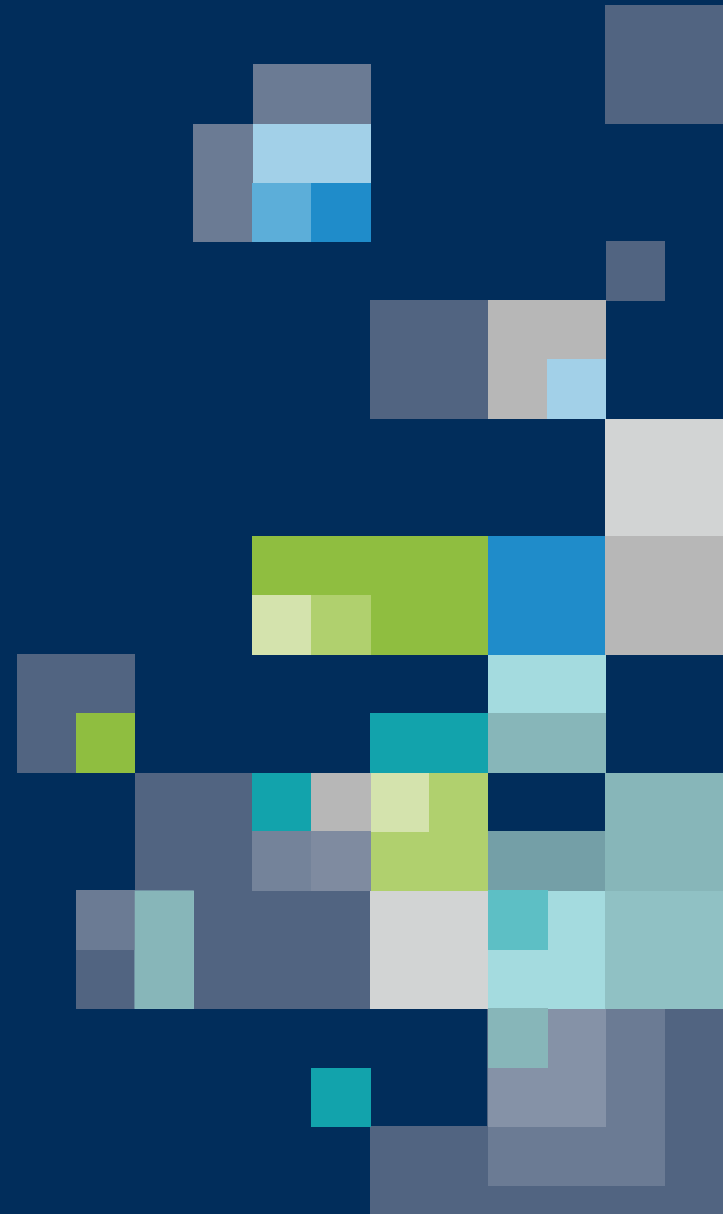
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- ACT Pharmacy Collaborative: <https://www.aacp.org/article/pharmacy-closures-us>
 - Pitt Closures over Time: <https://storymaps.arcgis.com/stories/21620f1e07c14d7f81adc4503faaf51e>
 - <https://benjaminjolley.substack.com/p/2275-pharmacies-have-closed-so-far>
-

Session 1: Building a Pharmacy Workforce that Serves Pharmacy Desert Areas and Expands the Pharmacy Workforce

“Current State of the Pharmacy Workforce”

Sharon Youmans, PharmD, MPH, FAPhA
Executive Vice Dean & Professor of Clinical Pharmacy
May 29, 2025



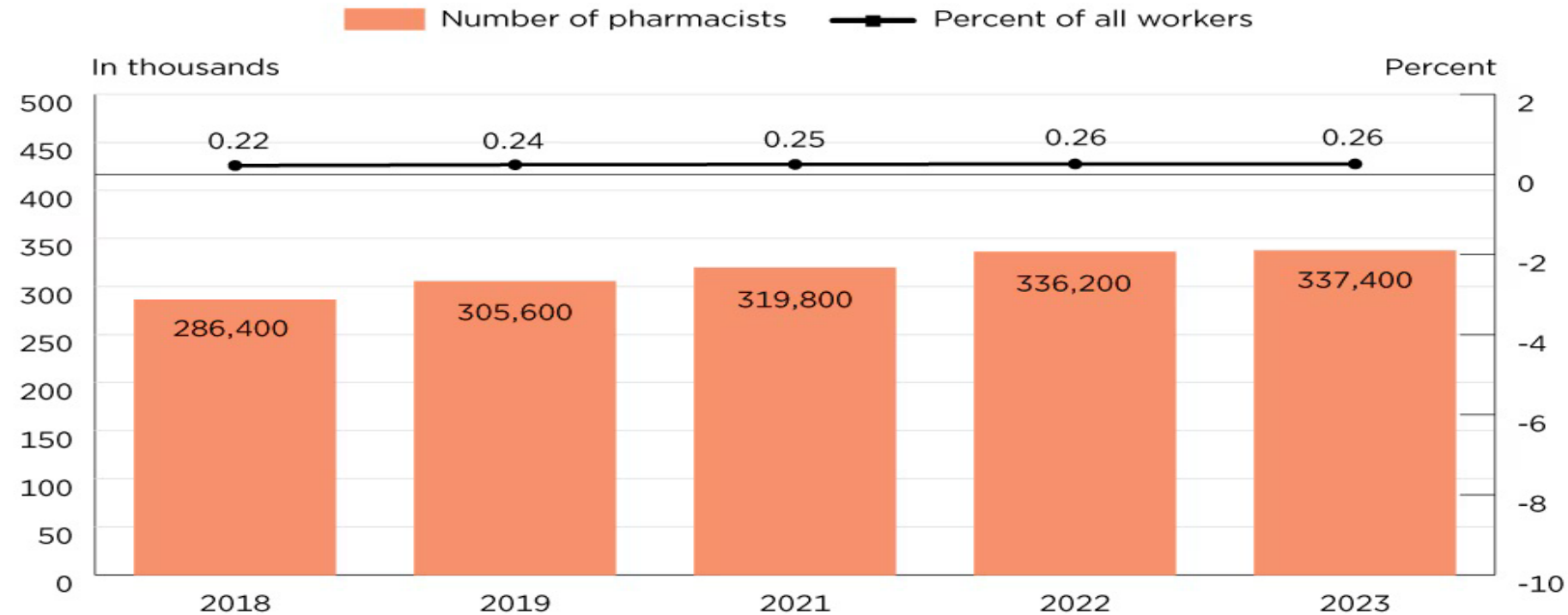
Disclaimer

This presentation represents my personal and professional views and opinions. I am not making this presentation in my capacity as a member of the Board of Directors of the Accreditation Council for Pharmacy Education (ACPE). The information contained has not been reviewed by, nor is it endorsed by ACPE.

No financial relationships to disclose.

Figure 1.

Estimated Number of U.S. Pharmacists and Share of All U.S. Workers: 2018–2023



¹ Source: 2018 through 2023 American Community Survey (ACS) 1-year estimates. Due to issues linked to the COVID-19 pandemic, 2020 data are excluded from the figures. For more information on the ACS, visit <https://census.gov/programs-surveys/acs/>.

• ~~Employment Projections~~ Current Workforce Needs

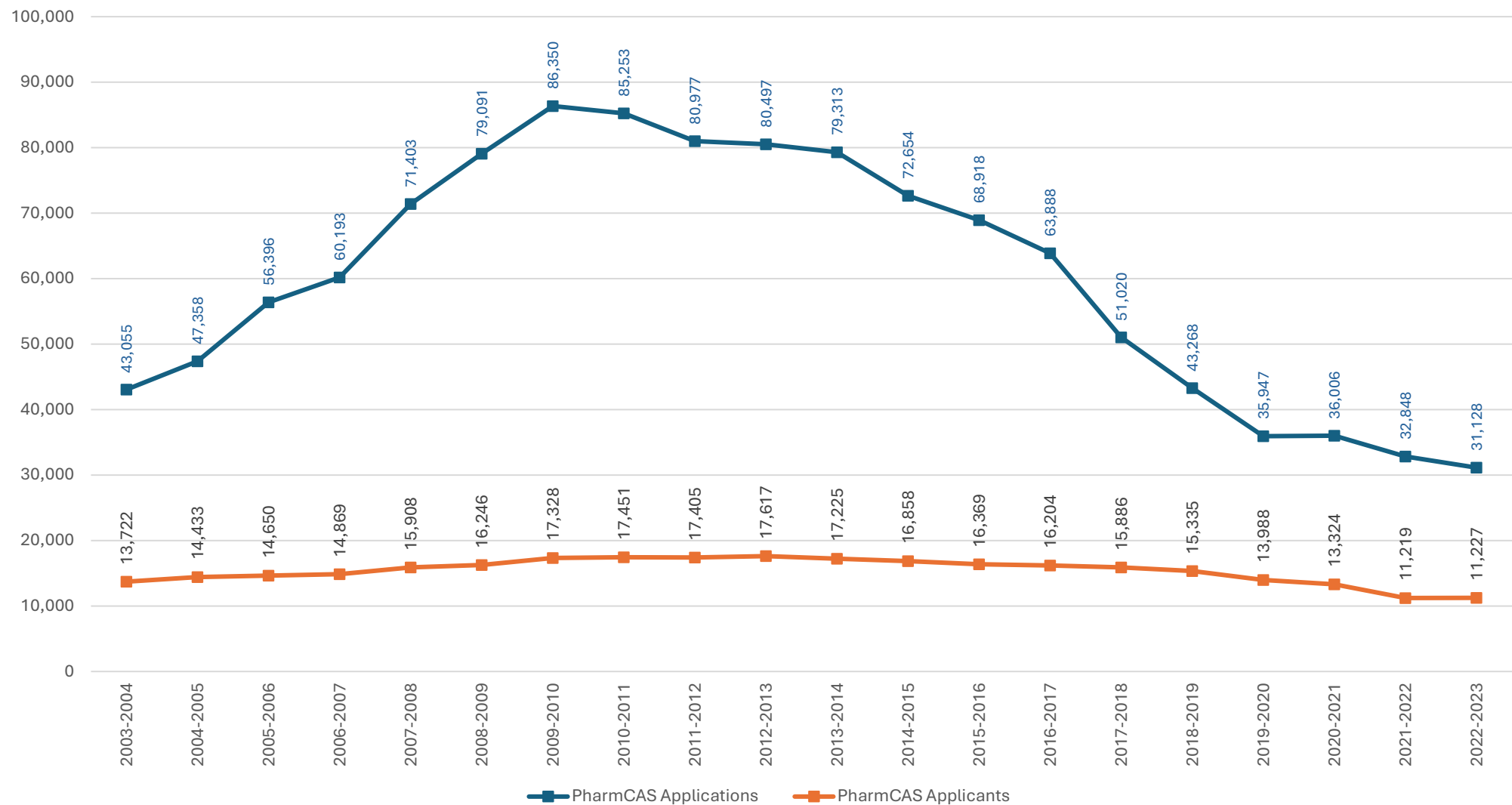
- Bureau of Labor Statistics: Projects 5% growth in employment from 2023 - 2033²
 - Pharmacists in healthcare diagnosing and medication management projected to grow 9% by 2032³
-
- Pharmacists Needed in these job sectors:
 - Hospitals
 - Outpatient clinics
 - Industry
 - Community

Current state Pharmacy Schools in USA

- Year 2000: **80** schools of pharmacy
- Year 2025: **141** schools of pharmacy



Current Status of Applications & Applicants - AACCP Data Report⁴



Factors influencing people to apply to Pharmacy School

- Positive Factors
 - Prestige of the doctorate degree
 - Job security/salary
 - Ability to improve health and wellbeing of others
 - Wide range of careers in pharmacy
 - Family members
 - Knowing a pharmacist and or exposure to the profession
 - Opportunities to work with other healthcare professionals

Factors influencing people to apply to Pharmacy School

- Negative
 - Economics – high cost of higher education
 - Difficulty of curriculum
 - Board exam/licensure requirements

Strategies to Increase Enrollments

- **Recruitment Efforts**

- Non-traditional groups (veterans, engineers, etc.)
- Focus on what pharmacists “do” in addition to traditional activities

- **Fundraising Efforts**

- Scholarships

- **Considerations to Reduce Costs of Pharmacy School**

- Reducing time (moving from 4 year to 3 year)
- Innovative Technologies to Delivery Curriculum (Hybrid, Online)
- CQI Methodologies– “Efficient, Effective, and Economical”

Specific Example:

UCSF Pharm Tech to PharmD Pathway Program

- Purpose
 - Prepare pharmacy technicians for admission into and success in pharmacy school
 - Increase the representation of pharmacists from medically underserved regions in California
- Program Components – 1 year program with monthly seminars
 - Academic Assessment – SOP Readiness
 - Diverse Career Opportunities
 - Interviewing Tips
 - Tips on Preparing Personal Statement

References

1. American Community Survey(ACS) 1-year estimates:
<https://www.census.gov/library/stories/2024/10/american-pharmacists-month.html> Accessed May 17, 2025
2. U.S. Bureau of Labor Statics: <https://www.bls.gov/ooh/healthcare/pharmacists> Accessed May 17, 2025
3. Pharmacist Job Outlook. U.S. Bureau of Labor Statistics
<https://www.bls.gov/ooh/healthcare/pharmacists.htm#tab-6> Accessed May 17, 2025
4. American Association of Colleges of Pharmacy. Application Data Report
5. Accreditation Council for Pharmacy Education. Programs: <https://www.acpe-accredit.org/accredited-programs-by-status/> Accessed May 17, 2025.
6. Bacci, Jennifer L., Natalia V. Oster, and Susan M. Skillman. "Insights into Decreasing Applicants to Schools and Colleges of Pharmacy in the United States." (2024).Center for Health Workforce Students
7. UCSF Pharm Tech to PharmD Pathway Program: <https://pharmd.ucsf.edu/admissions/pharmtech>
Accessed May 17, 2025

Defining Solutions for the Future

Lorri Walmsley, RPh, FAzPA
Director, Pharmacy Affairs

Pressure Mounts on Community Pharmacy

FINANCIAL TIMES

US drugstores vanish as pressures mount on business model

MarketWatch

The drugstore industry is struggling. Here's what could be in its future.

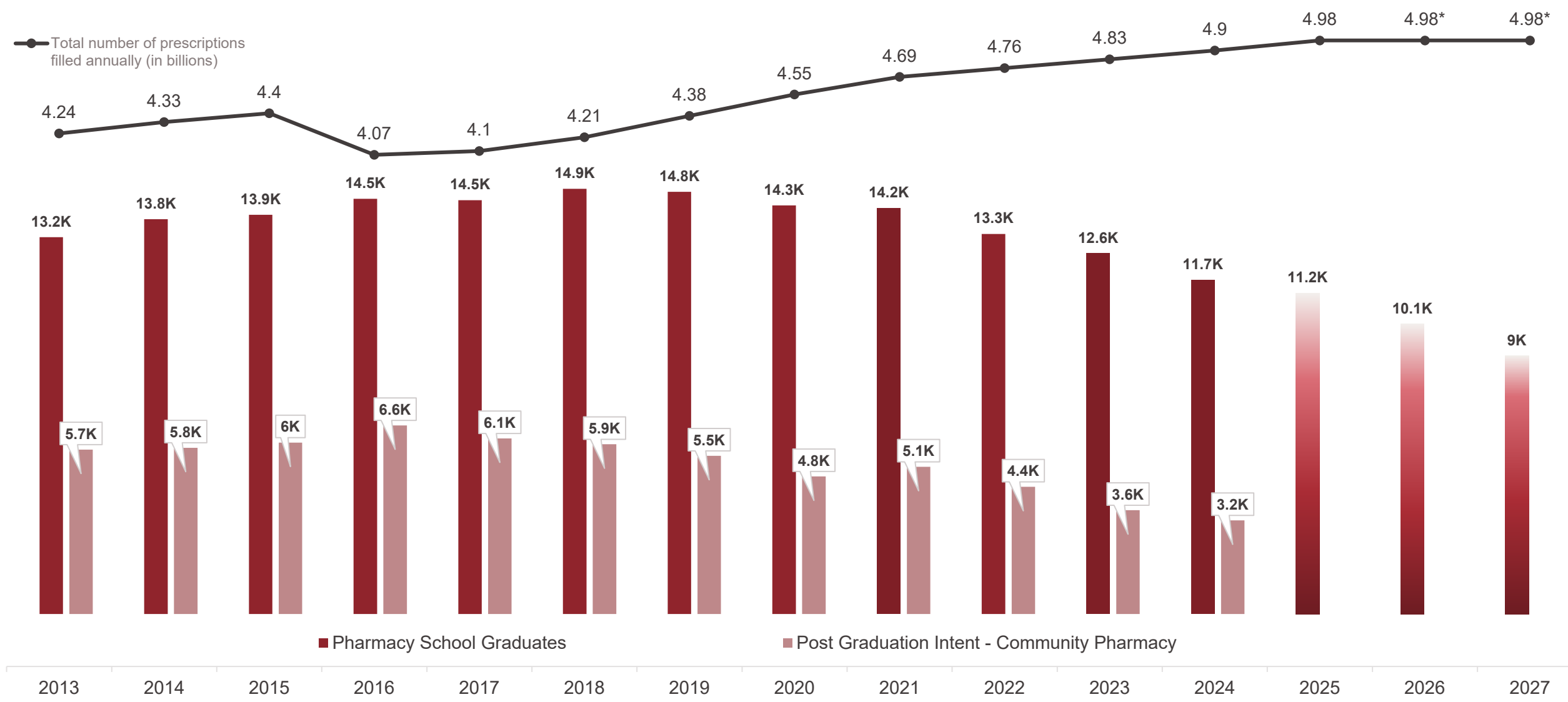
Nearly a third of the U.S. retail pharmacies that were open from 2010 to 2020 had shuttered by 2021, study finds

TIME

Why Your Pharmacy Experience Is Miserable

But there's a bigger and more complicated reason that pharmacies are struggling right now. It has to do with how pharmacies are compensated for the medications they dispense. Most patients are covered by insurance, and insurers use companies called Pharmacy Benefit Managers, or PBMs, to manage their prescription drug benefits. PBMs are essentially middlemen, but they have a huge amount of power because they determine how much pharmacies get compensated for each drug they dispense. Every year, pharmacists say, PBMs are offering less and less to pharmacies for the drugs they sell, sometimes forcing them to operate at a loss on popular drugs like Ozempic.

Number of Pharmacists Graduating and Entering Community Practice Declines While Demand for Pharmacy Services Increases



1. Statista, Total number of retail prescriptions filled annually in the United States from 2013 to 2025 (in billions), Total number of retail prescriptions filled annually in the U.S. 2013-2025 | Statista
2. AACP, Fall 2022 Degrees Conferred- Profile of Pharmacy Students, [fall-2022-degrees-conferred_0.xlsx](https://www.aacp.org/fall-2022-degrees-conferred) (live.com)
3. AACP, Fall 2022 Enrollments - Profile of Pharmacy Students, [fall-2022-pps-enrollments-appendix_0.xlsx](https://www.aacp.org/fall-2022-enrollments-appendix) (live.com)

Drive Efficiency and Accelerate Growth While Advancing the Practice of Pharmacy



Pharmacy Modernization: Defining the Future of Pharmacy and focusing investments on the next generation of pharmacy.



Pharmacy Operating Model: Optimizing and enabling operational excellence through the advancement of technology, centralized services and community pharmacy administration.



Core Clinical Programs: Continuing to manage and scale key pharmacy programs, including immunizations.



Core Rx Profitable Growth: Developing key programs that benefit patients and improving patient experience.



Elevating the Role of the Pharmacist: Continuing to advocate for provider status, ensuring patient safety and pharmacy compliance, partnering with critical stakeholders.

Walgreens Deans Advisory Council

- Evolve the community pharmacy business model to advocate for pharmacist practitioner services
- Improve on key aspects of community pharmacy strategy, practice, and administration-related topics
- Collaborate on ways to enhance the talent pipeline into colleges of pharmacy
- Elevate community pharmacy as a practice setting of choice through direct feedback from the colleges

Council Members

Oluwaranti Akiyode*, Howard University

Stuart Beatty, Ohio Northern University

Michelle Clark, Nova Southeastern

Robert DiCenzo, Massachusetts College of Pharmacy

Johnnie Early, Florida A&M University

Don Godwin*, University of New Mexico

Mark Leid, Washington State University

Anne Lin, St. John's University

George Mackinnon*, Medical College of Wisconsin

Suresh Madhavan, Temple University

Sharrel Pinto, Belmont University

Sunil Prabhu, Western University

Glen Schumock, University of Illinois

Kelly Smith, University of Georgia

Terri Warholak, St. Louis College of Pharmacy



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Council Co-Chair

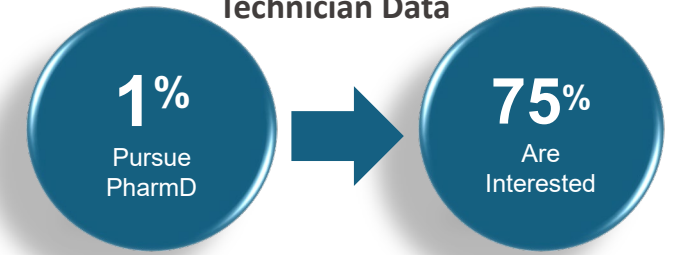


Lorri Walmsley
Council Vice-Chair

Learn from Our Team Members

Walgreens currently staffs over **50,000 pharmacy technicians across the US** who should be a pipeline into the role of pharmacist.

Pharmacy
Technician Data



The What

Analyze Internal Pipeline

Reviewed the last 3 years of conversion data, the **percent of our pharmacy technician** population who pursue a PharmD Degree is **1% annually**.

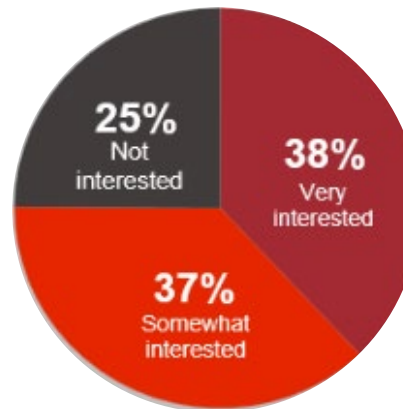
The Why

Gain Insight from Team Members



Survey was sent to **6020** random pharmacy locations.

Results from 2476 technicians



36%
Have associates
degree or higher

Top Barriers

- ✓ Financial cost of tuition and fees (86%)
- ✓ Balancing work, family, and school responsibilities (69%)

What would motivate you to pursue prepharmacy classes with Walgreens?

58.5%

➤ Program costs being fully covered by Walgreens.

21.3%

➤ A fully online program with flexibility to pursue courses at my own pace.

Advance Team Member Growth Through Talent

Innovation **PharmStart**

First-of-its-kind, fully funded online education program designed to help meet the prerequisite requirements for pharmacy school

Pharmacy Educational Assistance Program (PEAP)

Offers up to \$40,000 in tuition assistance, easing the financial burden of pharmacy school

Student Loan 401(k) Match Program

Helps team members paying off student loans earn their full match, even if they can't contribute 4%



Walgreens to pay workers' tuition to bolster pharmacist ranks



“Workforce surveys showed roughly 3 in 4 technicians want to attend pharmacy school, Rick Gates, chief pharmacy officer for Walgreens, told Axios. **‘But the bottlenecks were around the cost of tuition, their prerequisite requirements and balancing work and family,’** he said. **‘This helps solve all three to some extent.’”**

Redefine the Future through Technology

Micro-Fulfillment Centers (MFCs)

MFC-supported stores provide more personalized care, better adherence and higher vaccine delivery

Centralized Services (CS)

Completed 400M+ tasks last year—freeing up pharmacists for patient care

