
Virginia's Pharmacist Workforce: 2021

Healthcare Workforce Data Center

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14,947 Pharmacists voluntarily participated in this survey. Without their effort, the work of the center would not be possible. The Department of Health Professions, the Healthcare Workforce Data Center, and the Board of Pharmacy express our sincerest appreciation for their ongoing cooperation.

Thank You!

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The Pharmacist Workforce: At a Glance:

The Workforce

Licensees:	16,475
Virginia's Workforce:	8,896
FTEs:	7,302

Background

Rural Childhood:	32%
HS Degree in VA:	48%
Prof. Degree in VA:	49%

Current Employment

Employed in Prof.:	91%
Hold 1 Full-time Job:	73%
Satisfied?:	83%

Survey Response Rate

All Licensees:	91%
Renewing Practitioners:	97%

Education

Baccalaureate:	30%
Pharm.D./Professional:	70%

Job Turnover

Switched Jobs in 2021:	5%
Employed over 2 yrs:	61%

Demographics

Female:	67%
Diversity Index:	53%
Median Age:	44

Finances

Median Inc.:	\$120k-\$130k
Health Benefits:	68%
Under 40 w/ Ed debt:	71%

Primary Roles

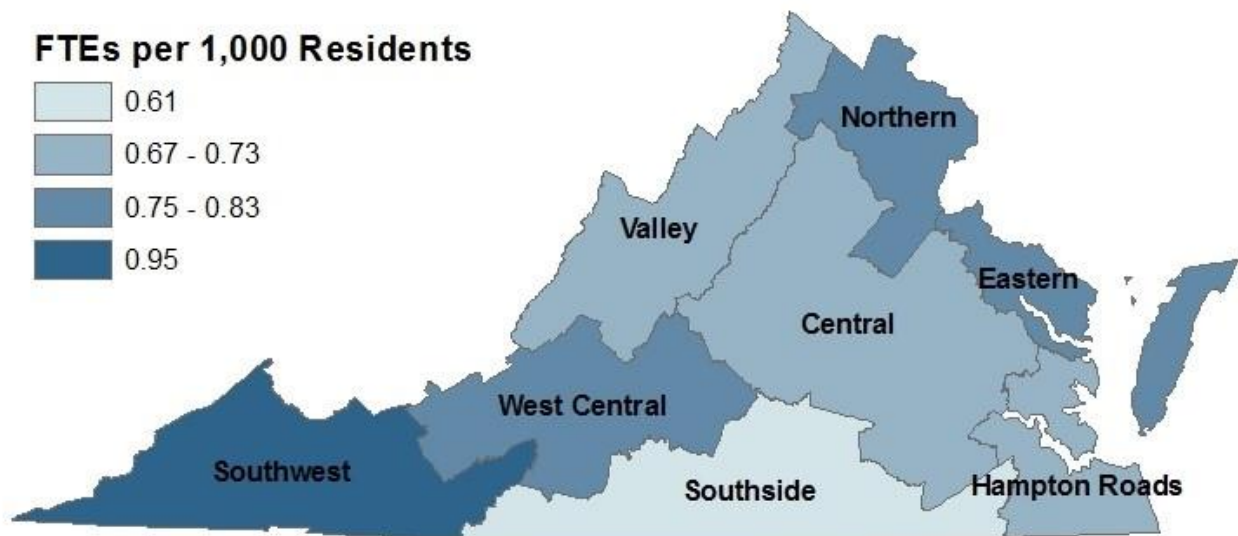
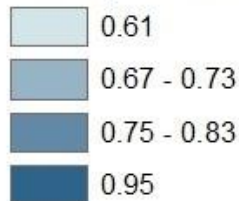
Patient Care:	73%
Administration:	8%
Education:	1%

Source: Va. Healthcare Workforce Data Center

Full Time Equivalency Units Provided by Pharmacists per 1,000 Residents by Virginia Performs Regions

Source: Va Healthcare Workforce Data Center

FTEs per 1,000 Residents



Annual Estimates of the Resident Population: July 1, 2020
Source: U.S. Census Bureau, Population Division



Results in Brief

A total of 14,947 pharmacists voluntarily took part in the 2021 Pharmacist Workforce Survey. The Virginia Department of Health Professions' Healthcare Workforce Data Center (HWDC) administers the survey during the license renewal process, which takes place every December for pharmacists. These survey respondents represent 91% of the 16,475 pharmacists who are licensed in the state and 97% of renewing practitioners. The HWDC estimates that the 8,896 pharmacists in the Virginia's workforce during the survey period provided 7,302 full-time equivalency units (FTE).

The majority of Virginia's pharmacists are female, and the median age among those in the workforce is 44. About one-third of pharmacists grew up in a rural area, and nearly one-quarter of these professionals currently work in non-metro areas of the state. Overall, 11% of Virginia's pharmacists work in a non-metro area. Around 70% of Virginia's pharmacist workforce have earned a doctorate or other professional degree as their highest educational attainment. Further, 43% of pharmacists currently carry educational debt, including nearly three-quarters of those under the age of 40. The median debt for those pharmacists with educational debt is between \$120,000 and \$130,000.

Nine out of every ten pharmacists are currently employed in the profession, with 73% holding one full-time position. Over the past year, 1% of pharmacists were involuntarily unemployed, while another 3% were underemployed. The typical pharmacist earned between \$120,000 and \$130,000 in 2021. Around 83% of all pharmacists are satisfied with their current employment situation, including 42% who indicated that they are "very satisfied".

About 90% of all pharmacists work in the private sector, including 64% who work at a for-profit organization. Large community pharmacies (i.e., pharmacies with more than 10 locations) were the most common working establishment type for Virginia's pharmacist workforce, employing 27% of all professionals. Hospital systems and smaller pharmacies were also common employers. About half of pharmacists expect to retire by the age of 65 and 8% of the current workforce expect to retire in the next two years. Half of the current workforce expect to retire by 2046.

Summary of Trends

The total number of licensed pharmacists has grown by 29% since 2013. Of these, the number working in the state workforce has also increased but the increase of 12% is modest by comparison. However, the 7% increase in FTE provided in state by pharmacists in the same period is even a more modest increase.

The diversity index of Virginia's pharmacists increased from 47% in 2013 to 53% in 2020 and stayed the same in 2021. The percentage of pharmacists who are female also continued inching up by about one percent nearly every other year, from 62% in 2013 to 67% in 2021. Median age has been relatively stable between 44 to 45 years in the past eight surveys. Even the percent under age 40, which increased from 37% in 2013 to 40% in 2016, has stayed the same in the past five years.

Educational attainment continues to increase among the pharmacist workforce. In 2013, only 51% had a pharmacy doctorate compared to 70% in 2021. Not surprisingly, the percent reporting educational debt has also increased annually from 35% in 2013 to 43% in 2021. Further, the median educational debt, which increased from \$90K-\$100K in 2013 to \$110K-\$120K in 2018, is now \$120K-\$130K.

The labor market for pharmacists has recovered from the impact of the pandemic; the percent involuntarily unemployed has declined from 3% to the pre-2017 level of 1%. Further, around 91% reported being employed in the profession and the current involuntary unemployment rate in December 2021, when the survey took place, was 1%. Median income has been stable at \$120K to \$130K between 2016 and 2021 after increasing from \$110K-\$120K in 2013. However, the percent earning above \$140,000 increased from 17% in 2016 to 25% in 2021; only 12% were in that income range in 2013. Job satisfaction declined to the lowest level at 83% from to 87% last year; this was driven by pharmacists who reported being very satisfied with their job who declined from 47% to 42%.

Pharmacists intending to retire in the next decade increased from 22% in the pre-2017 surveys to 25% in 2021. The percent planning to retire in the next two years increased from 6% in 2013 to 8% in recent years. Regarding future plans, only 8% intended to pursue additional education in 2021 compared to 13% in 2013.

A Closer Look:

Licensee Counts		
License Status	#	%
Renewing Practitioners	14,783	90%
New Licensees	837	5%
Non-Renewals	855	5%
All Licensees	16,475	100%

Source: Va. Healthcare Workforce Data Center

HWDC surveys tend to achieve very high response rates. 97% of renewing pharmacists submitted a survey. These represent 91% of pharmacists who held a license at some point in 2021.

Statistic	Response Rates		Response Rate
	Non Respondents	Respondent	
By Age			
Under 30	135	792	85%
30 to 34	219	2,256	91%
35 to 39	231	2,598	92%
40 to 44	171	2,030	92%
45 to 49	136	1,763	93%
50 to 54	153	1,740	92%
55 to 59	116	1,366	92%
60 and Over	367	2,402	87%
Total	1,528	14,947	91%
New Licenses			
Issued in 2021	265	572	68%
Metro Status			
Non-Metro	107	1,049	91%
Metro	639	8,118	93%
Not in Virginia	782	5,781	88%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Licensed Pharmacists

Number:	16,475
New:	5%
Not Renewed:	5%

Survey Response Rates

All Licensees:	91%
Renewing Practitioners:	97%

Source: Va. Healthcare Workforce Data Center

Response Rates

Completed Surveys	14,947
Response Rate, all licensees	91%
Response Rate, Renewals	97%

Source: Va. Healthcare Workforce Data Center

Definitions

- The Survey Period:** The survey was conducted in December 2021.
- Target Population:** All pharmacists who held a Virginia license at some point in 2021.
- Survey Population:** The survey was available to those who renewed their licenses online. It was not available to those who did not renew, including some pharmacists newly licensed in 2021.

At a Glance:

Workforce

Pharmacist Workforce: 8,896
 FTEs: 7,302

Utilization Ratios

Licensees in VA Workforce: 54%
 Licensees per FTE: 2.26
 Workers per FTE: 1.22

Source: Va. Healthcare Workforce Data Center

Virginia's Pharmacist Workforce		
Status	#	%
Worked in Virginia in Past Year	8,669	97%
Looking for Work in Virginia	227	3%
Virginia's Workforce	8,896	100%
Total FTEs	7,302	
Licensees	16,475	

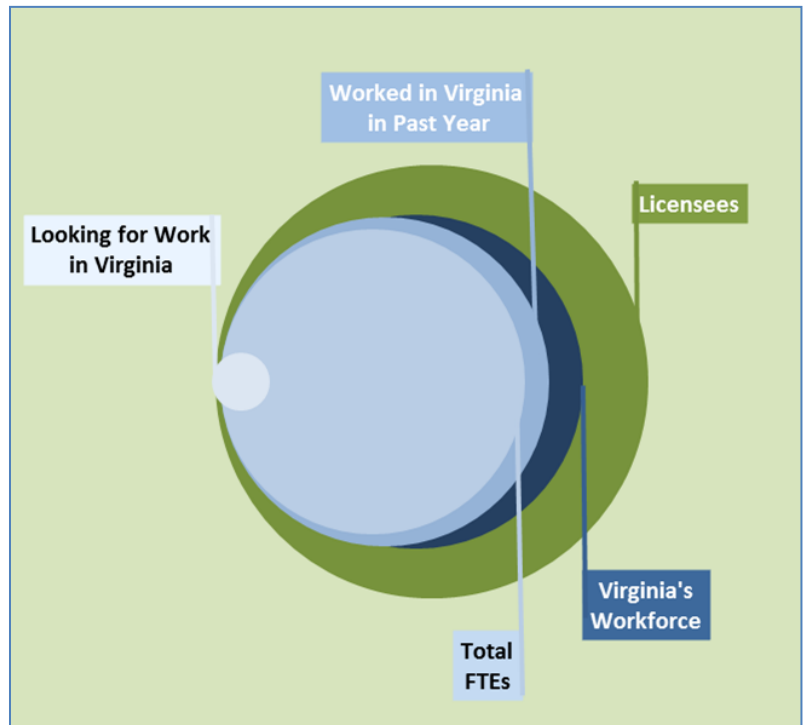
Source: Va. Healthcare Workforce Data Center

This report uses weighting to estimate the figures in this report. Unless otherwise noted, figures refer to the Virginia Workforce only. For more information on HWDC's methodology visit:

www.dhp.virginia.gov/hwdc

Definitions

- 1. Virginia's Workforce:** A licensee with a primary or secondary work site in Virginia at any time in the past year or who indicated intent to return to Virginia's workforce at any point in the future.
- 2. Full Time Equivalency Unit (FTE):** The HWDC uses 2,000 hours (40 hours for 50 weeks with 2 weeks off) as its baseline measure for FTEs.
- 3. Licensees in VA Workforce:** The proportion of licensees in Virginia's Workforce.
- 4. Licensees per FTE:** An indication of the number of licensees needed to create 1 FTE. Higher numbers indicate lower licensee participation.
- 5. Workers per FTE:** An indication of the number of workers in Virginia's workforce needed to create 1 FTE. Higher numbers indicate lower utilization of available workers.



Source: Va. Healthcare Workforce Data Center

A Closer Look:

Age & Gender						
Age	Male		Female		Total	
	#	% Male	#	% Female	#	% in Age Group
Under 30	131	22%	456	78%	587	8%
30 to 34	349	31%	765	69%	1,114	15%
35 to 39	357	31%	797	69%	1,154	16%
40 to 44	247	28%	639	72%	887	12%
45 to 49	227	30%	541	71%	768	11%
50 to 54	245	30%	578	70%	822	11%
55 to 59	223	33%	448	67%	671	9%
60 +	620	51%	598	49%	1,218	17%
Total	2,399	33%	4,823	67%	7,222	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Gender

% Female: 67%
 % Under 40 Female: 71%

Age

Median Age: 44
 % Under 40: 40%
 % 55+: 26%

Diversity

Diversity Index: 53%
 Under 40 Div. Index: 58%

Source: Va. Healthcare Workforce Data Center

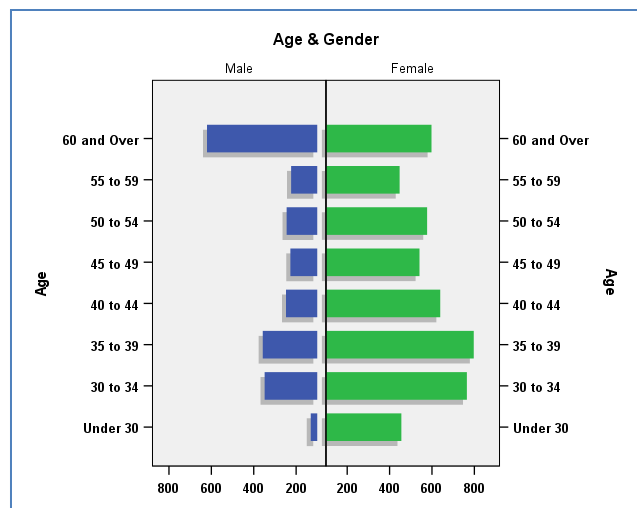
Race & Ethnicity					
Race/ Ethnicity	Virginia*	Pharmacists		Pharmacists Under 40	
	%	#	%	#	%
White	59%	4,671	65%	1,695	60%
Black	18%	836	12%	352	12%
Asian	7%	1,320	18%	625	22%
Other Race	1%	118	2%	43	2%
Two or more races	5%	125	2%	70	2%
Hispanic	11%	122	2%	63	2%
Total	100%	7,192	100%	2,848	100%

** Population data in this chart is from the U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171). Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: July 1, 2020.

Source: Va. Healthcare Workforce Data Center

In a chance encounter between two pharmacists, there is a 53% chance that they would be of a different race/ethnicity (a measure known as the Diversity Index). For Virginia's population as a whole, the comparable number is 60%.

40% of pharmacists are under the age of 40, and 71% of these professionals are female. In addition, pharmacists who are under the age of 40 are slightly less diverse than Virginia's overall population.



Source: Va. Healthcare Workforce Data Center

At a Glance:

Childhood

Urban Childhood: 17%
 Rural Childhood: 32%

Virginia Background

HS in Virginia: 48%
 Prof. Education in VA: 49%
 HS/Prof. Educ. in VA: 57%

Location Choice

% Rural to Non-Metro: 24%
 % Urban/Suburban to Non-Metro: 5%

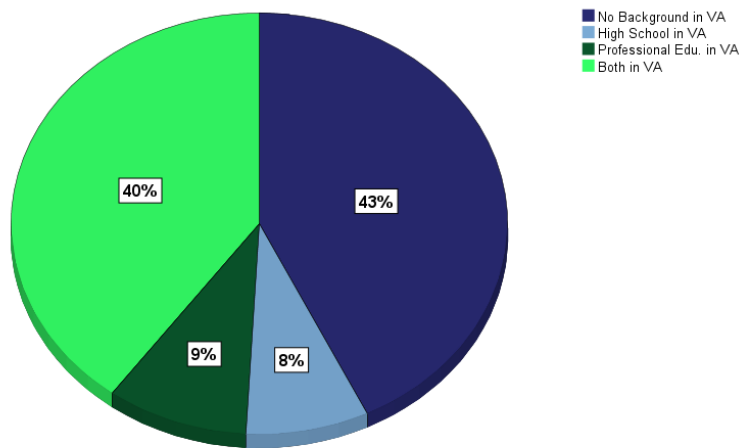
Source: Va. Healthcare Workforce Data Center

A Closer Look:

Primary Location: USDA Rural Urban Continuum		Rural Status of Childhood Location		
Code	Description	Rural	Suburban	Urban
Metro Counties				
1	Metro, 1 million+	22%	58%	21%
2	Metro, 250,000 to 1 million	52%	42%	6%
3	Metro, 250,000 or less	40%	49%	12%
Non-Metro Counties				
4	Urban pop 20,000+, metro adjacent	53%	38%	8%
6	Urban pop, 2,500-19,999, metro adjacent	60%	31%	9%
7	Urban pop, 2,500-19,999, non adjacent	92%	6%	2%
8	Rural, metro adjacent	55%	34%	11%
9	Rural, non adjacent	71%	22%	7%
Overall		32%	52%	17%

Source: Va. Healthcare Workforce Data Center

Educational Background in Virginia



32% of pharmacists grew up in self-described rural areas, and 24% of these professionals currently work in non-metro counties. Overall, 11% of Virginia's pharmacist workforce currently work in non-metro counties.

Source: Va. Healthcare Workforce Data Center

Top Ten States for Pharmacy Recruitment

Rank	All Pharmacists			
	High School	#	Professional School	#
1	Virginia	3,382	Virginia	3,434
2	Outside U.S./Canada	851	Pennsylvania	466
3	Pennsylvania	430	North Carolina	339
4	New York	332	Outside U.S./Canada	317
5	Maryland	213	New York	254
6	North Carolina	209	Maryland	234
7	West Virginia	174	Massachusetts	184
8	New Jersey	145	West Virginia	176
9	Ohio	133	Washington, D.C.	175
10	Florida	115	Ohio	137

Source: Va. Healthcare Workforce Data Center

48% of Virginia's pharmacists received their high school degree in Virginia, and 49% received their initial professional degree in the state.

Among pharmacists who have been licensed in the past five years, 43% received their high school degree in Virginia, and 44% received their initial professional degree in the state.

Rank	Licensed in the Past 5 Years			
	High School	#	Professional School	#
1	Virginia	718	Virginia	730
2	Outside U.S./Canada	205	Pennsylvania	103
3	Pennsylvania	95	North Carolina	103
4	Maryland	75	Maryland	87
5	North Carolina	73	Tennessee	68
6	New York	67	New York	60
7	Florida	46	Outside U.S./Canada	56
8	Ohio	37	West Virginia	48
9	West Virginia	30	Massachusetts	42
10	New Jersey	28	Florida	39

Source: Va. Healthcare Workforce Data Center

46% of Virginia's licensed pharmacists did not participate in Virginia's workforce in 2021. 91% of these professionals worked at some point in the past year, including 83% who currently work as pharmacists.

At a Glance:

Not in VA Workforce

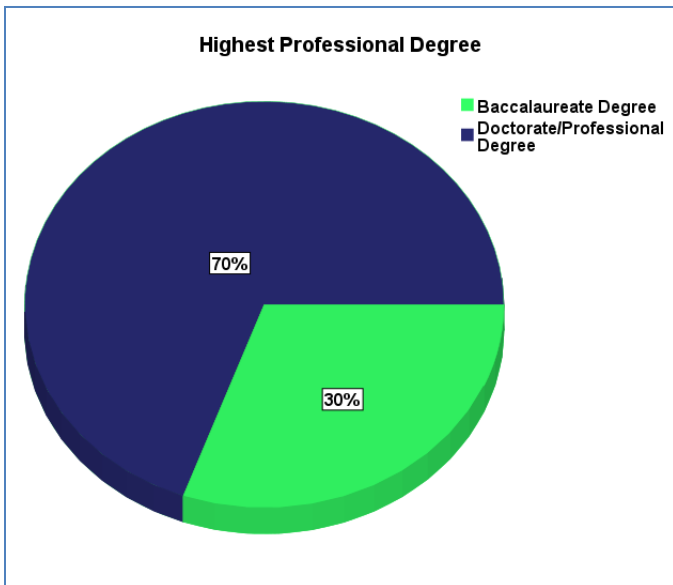
Total:	7,580
% of Licensees:	46%
Federal/Military:	7%
VA Border State/DC:	18%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Highest Professional Degree		
Degree	#	%
B.S. Pharmacy	2,114	30%
Pharm.D.	4,819	70%
Total	6,933	100%

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

At a Glance:

Education

B.S. Pharmacy: 30%

Pharm.D.: 70%

Educational Debt

Carry debt: 43%

Under age 40 w/ debt: 71%

Median debt: \$120k-\$130k

Source: Va. Healthcare Workforce Data Center

70% of pharmacists hold a Doctorate in Pharmacy as their highest professional degree, while all remaining professionals have earned a Bachelor's degree in Pharmacy.

43% of pharmacists currently have educational debt, including 71% of those under the age of 40. For those with educational debt, the median debt is between \$120,000 and \$130,000. Among those under the age of 40 with debt, median is \$150,000 to \$160,000.

Educational Debt				
Amount Carried	All Pharmacists		Pharmacists Under 40	
	#	%	#	%
None	3,295	57%	654	29%
\$20,000 or less	170	3%	71	3%
\$20,001-\$40,000	188	3%	66	3%
\$40,001-\$60,000	225	4%	88	4%
\$60,001-\$80,000	217	4%	114	5%
\$80,001-100,000	204	4%	105	5%
\$100,001-\$120,000	190	3%	123	5%
\$120,001-\$140,000	140	2%	103	5%
\$140,001-\$160,000	187	3%	148	7%
\$160,001-\$180,000	121	2%	106	5%
\$180,001-\$200,000	139	2%	119	5%
Over \$200,000	681	12%	561	25%
Total	5,757	100%	2,258	100%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

At a Glance:

Top Specialties

Immunization:	15%
Community Pharmacy:	8%
Ambulatory Care:	4%

Top Board Certifications

BPS - Pharmacotherapy:	6%
BPS - Ambulatory Care:	1%
BCGP - Geriatrics:	1%

Top Residencies (PGY1)

Pharmacy Practice (Post 1993):	11%
Community Pharmacy:	5%
Pharmacy Practice (Pre 1993):	3%

Source: Va. Healthcare Workforce Data Center

PGY1		
Residency	#	%
Pharmacy Practice (Post 1993)	1013	11%
Community Pharmacy	404	5%
Pharmacy Practice (Pre 1993)	267	3%
Managed Care Pharmacy	45	1%
Total	1,729	19%
PGY2		
Ambulatory Care	102	1%
Critical Care	64	1%
Internal Medicine/Cardiology	45	1%
Drug Information	45	1%
Infectious Disease	34	<1%
Pediatrics	34	<1%
Oncology	32	<1%
Psychiatry	28	<1%
Health-system Pharmacy Administration	26	<1%
Geriatrics	24	<1%
Managed Care Pharmacy System	18	<1%
Emergency medicine	13	<1%
Pharmacotherapy	13	<1%
Other	148	2%
At Least One	616	7%

Source: Va. Healthcare Workforce Data Center

Board Certifications		
Certification	#	%
BPS-Pharmacotherapy	529	6%
BPS-Ambulatory Care	98	1%
BCGP-Geriatrics	79	1%
BPS-Oncology	45	1%
BPS- Psychiatric	22	<1%
BPS- Nutrition	9	<1%
BPS-Nuclear Pharmacy	5	<1%
ABAT-Applied Toxicology	1	<1%
Other Board Certification	232	3%
At Least One Certification	937	11%

Source: Va. Healthcare Workforce Data Center

11% of pharmacists hold a board certification, including 6% who hold a certification in Pharmacotherapy. 31% also have a self-designated specialty area, including 15% who have a specialization in immunization.

At a Glance:

Top Services

Immunization:	34%
Medication Management:	27%
Compounding:	22%

Disease Management

Anticoagulation:	25%
Diabetes:	3%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Disease Management in Collaborative Practice

	#	%
Anticoagulation	228	41%
Diabetes	221	40%
Hypertension	200	36%
Hypercholesterolemia	175	32%
Tobacco Cessation	129	23%
Asthma	121	22%
Travel Medications	61	11%
At least one	358	65%

Source: Va. Healthcare Workforce Data Center

65% of the 551 pharmacists with a collaborative practice agreement were involved in providing at least one disease management service; anticoagulation management was the most commonly reported by 41% of those with the agreement. 27% of pharmacists in the state workforce also utilized one of the listed statewide protocol

Services Provided

Services	Primary		Secondary	
	#	%	#	%
Primary Service, Immunization	3,022	34%	3,022	34%
Primary Service, Medication Therapy Management	2,372	27%	284	3%
Primary Service, Compounding	1,967	22%	209	2%
Primary Service, Central Filling	1,149	13%	141	2%
Primary Service, Remote Order Processing	994	11%	89	1%
Primary Service, Collaborative Practice Agreement	551	6%	69	1%
At Least One	4,655	52%	3,229	36%

Source: Va. Healthcare Workforce Data Center

Statewide Protocols

	#	%
Naloxone	1,525	17%
Lowering Out-of-Pocket Expenses	293	3%
Epinephrine	286	3%
Emergency Contraception	153	2%
Prenatal Vitamins	121	1%
Hormonal Contraception	85	1%
At Least One	2,417	27%

At a Glance:

Employment

Employed in Profession: 91%
 Involuntarily Unemployed: 1%

Positions Held

1 Full-time: 73%
 2 or More Positions: 8%

Weekly Hours:

40 to 49: 51%
 60 or more: 4%
 Less than 30: 12%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Current Work Status		
Status	#	%
Employed, capacity unknown	8	<1%
Employed in a pharmacy-related capacity	6,325	91%
Employed, NOT in a pharmacy-related capacity	260	4%
Not working, reason unknown	0	0%
Involuntarily unemployed	42	1%
Voluntarily unemployed	174	3%
Retired	144	2%
Total	6,952	100%

Source: Va. Healthcare Workforce Data Center

91% of Virginia’s pharmacists are currently employed in the profession, and 1% of all pharmacy professionals are involuntarily unemployed at the survey period. 73% of the state’s pharmacist workforce have one full-time job, while 8% of pharmacists have multiple positions. 51% of pharmacists work between 40 and 49 hours per week, while 4% of pharmacy professionals work at least 60 hours per week.

Current Positions		
Positions	#	%
No Positions	360	5%
One Part-Time Position	929	14%
Two Part-Time Positions	148	2%
One Full-Time Position	4,970	73%
One Full-Time Position & One Part-Time Position	345	5%
Two Full-Time Positions	11	0%
More than Two Positions	47	1%
Total	6,810	100%

Source: Va. Healthcare Workforce Data Center

Current Weekly Hours		
Hours	#	%
0 hours	360	5%
1 to 9 hours	158	2%
10 to 19 hours	227	3%
20 to 29 hours	455	7%
30 to 39 hours	1,298	19%
40 to 49 hours	3,463	51%
50 to 59 hours	523	8%
60 to 69 hours	172	3%
70 to 79 hours	64	1%
80 or more hours	59	1%
Total	6,779	100%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Income		
Annual Income	#	%
Volunteer Work Only	52	1%
\$50,000 or less	389	8%
\$50,001-\$60,000	113	2%
\$60,001-\$70,000	106	2%
\$70,001-\$80,000	134	3%
\$80,001-\$90,000	170	4%
\$90,001-\$100,000	233	5%
\$100,001-\$110,000	452	9%
\$110,001-\$120,000	581	12%
\$120,001-\$130,000	737	15%
\$130,001-\$140,000	691	14%
\$140,001-\$150,000	496	10%
More than \$150,000	753	15%
Total	4,907	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Annual Income
Median Income: \$120k-130k

Benefits
Employer Retirement: 68%
Employer Health Insurance: 69%

Satisfaction
Satisfied: 83%
Very Satisfied: 42%

Source: Va. Healthcare Workforce Data Center

Job Satisfaction		
Level	#	%
Very Satisfied	2,838	42%
Somewhat Satisfied	2,731	41%
Somewhat Dissatisfied	732	11%
Very Dissatisfied	402	6%
Total	6,703	100%

Source: Va. Healthcare Workforce Data Center

The typical pharmacist earned between \$120,000 and \$130,000 in 2021. Among pharmacists who received either an hourly wage or a salary as compensation at their primary work location, 68% received health insurance and 69% also had access to a retirement plan.

Employer-Sponsored Benefits			
Benefit	#	%	% of Wage/Salary Employees
Paid Vacation Leave	4,705	74%	78%
Retirement	4,192	66%	69%
Health Insurance	4,119	65%	68%
Dental Insurance	4,004	63%	67%
Paid Sick Leave	3,608	57%	60%
Group Life Insurance	2,946	47%	49%
Signing/Retention Bonus	437	7%	7%
Received At Least One Benefit	5,066	80%	83%

*From any employer at time of survey.

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Underemployment in Past Year		
In the past year did you . . . ?	#	%
Experience Involuntary Unemployment?	120	1%
Experience Voluntary Unemployment?	289	3%
Work Part-time or temporary positions, but would have preferred a full-time/permanent position?	274	3%
Work two or more positions at the same time?	672	8%
Switch employers or practices?	474	5%
Experienced at least 1	1,509	17%

Source: Va. Healthcare Workforce Data Center

1% of Virginia's pharmacists were involuntary unemployed at some point in 2021. By comparison, Virginia's average monthly unemployment rate was 4.0%.¹

Location Tenure				
Tenure	Primary		Secondary	
	#	%	#	%
Not Currently Working at this Location	153	2%	70	8%
Less than 6 Months	674	10%	151	17%
6 Months to 1 Year	577	9%	106	12%
1 to 2 Years	1,118	17%	128	14%
3 to 5 Years	1,324	21%	186	21%
6 to 10 Years	1,012	16%	119	13%
More than 10 Years	1,601	25%	137	15%
Subtotal	6,458	100%	896	100%
Did not have location	281		7,950	
Item Missing	2,157		49	
Total	8,896		8,896	

Source: Va. Healthcare Workforce Data Center

Nearly half of all pharmacists receive a salary or commission at their primary work location, while 44% receive an hourly wage.

At a Glance:

Unemployment Experience

Involuntarily Unemployed: 1%
Underemployed: 3%

Stability

Switched: 5%
New Location: 23%
Over 2 years: 61%
Over 2 yrs, 2nd location: 49%

Employment Type

Salary or Wage: 93%

Source: Va. Healthcare Workforce Data Center

61% of pharmacists have worked at their primary location for more than 2 years—the job tenure normally required to get a conventional mortgage loan.

Employment Type		
Primary Work Site	#	%
Salary/ Commission	2,869	49%
Hourly Wage	2,570	44%
By Contract	82	1%
Business/ Practice Income	258	4%
Unpaid	27	0%
Subtotal	5,806	100%

Source: Va. Healthcare Workforce Data Center

¹ As reported by the US Bureau of Labor Statistics, the non-seasonally adjusted monthly unemployment rate declined from 5.7% in January 2021 to a low of 2.7% in November and December 2021. December's unemployment rate was preliminary at the time of publication.

At a Glance:

Concentration

Top Region:	27%
Top 3 Regions:	72%
Lowest Region:	2%

Locations

2 or more (2020):	11%
2 or more (Now*):	13%

Source: Va. Healthcare Workforce Data Center

Over half of all pharmacists in the state work in either Northern Virginia or Central Virginia.

A Closer Look:

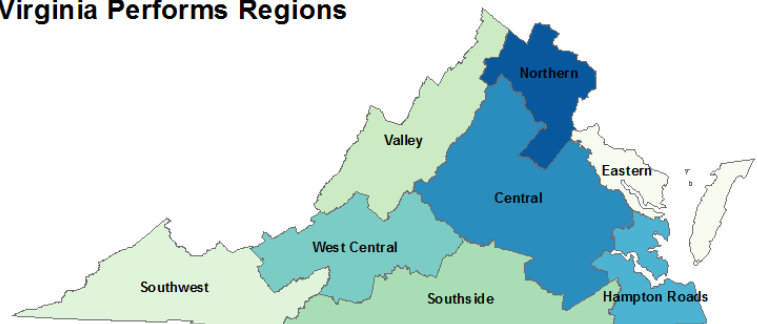
Regional Distribution of Work Locations				
Virginia Performs Region	Primary Location		Secondary Location	
	#	%	#	%
Central	1,685	26%	172	19%
Eastern	98	2%	19	2%
Hampton Roads	1,197	19%	138	15%
Northern	1,720	27%	236	26%
Southside	206	3%	35	4%
Southwest	381	6%	77	8%
Valley	364	6%	59	6%
West Central	676	11%	78	9%
Virginia Border State/DC	44	1%	38	4%
Other US State	50	1%	51	6%
Outside of the US	2	0%	6	1%
Total	6,423	100%	909	100%
Item Missing	2,190		36	

Source: Va. Healthcare Workforce Data Center

Number of Work Locations				
Locations	Work Locations in 2021		Work Locations Now*	
	#	%	#	%
0	280	3%	349	5%
1	7,671	86%	5,488	82%
2	494	6%	473	7%
3	274	3%	247	4%
4	40	0%	28	0%
5	28	0%	19	0%
6 or More	110	1%	70	1%
Total	8,896	100%	6,673	100%

*At the time of survey completion, December 2021. Source: Va. Healthcare Workforce Data Center

Virginia Performs Regions



Over the past year, 11% of Virginia's pharmacists worked at multiple locations.

A Closer Look:

Sector	Location Sector			
	Primary Location		Secondary Location	
	#	%	#	%
For-Profit	3,823	64%	601	70%
Non-Profit	1,552	26%	188	22%
State/Local Government	227	4%	36	4%
Veterans Administration	140	2%	7	1%
U.S. Military	112	2%	14	2%
Other Federal Gov't	76	1%	10	1%
Total	5,930	100%	856	100%
Did not have location	281		7,950	
Item Missing	2,685		91	

Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

Sector

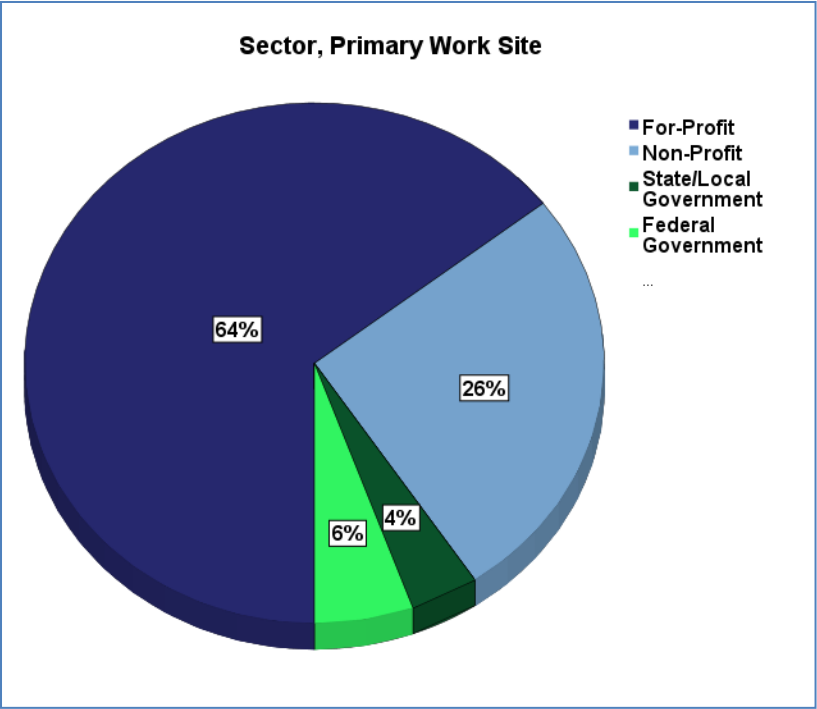
For Profit:	64%
Federal:	6%

Top Establishments

Large Chain Pharmacy: (11+ Stores)	27%
Hospital/Health System: (Inpatient)	25%
Independent Pharmacy: (1-4 Stores)	9%

Source: Va. Healthcare Workforce Data Center

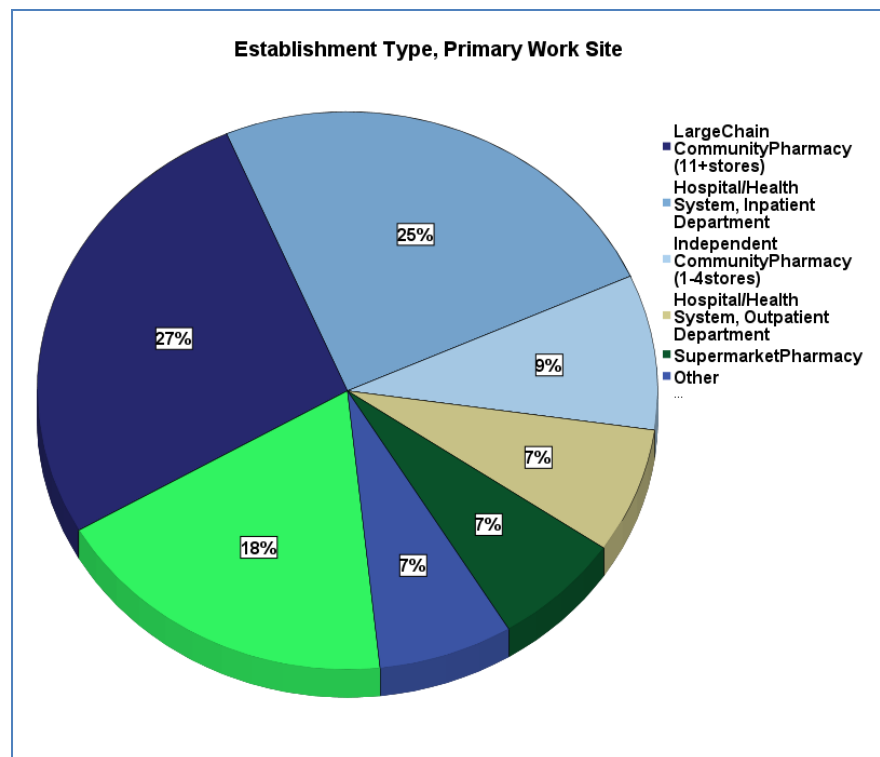
90% of all pharmacists work in the private sector, including 64% who work at a for-profit company. Another 6% of pharmacists work for the federal government, while 4% work for a state or local government.



Top Location Types				
Establishment Type	Primary Location		Secondary Location	
	#	%	#	%
Large Chain Community Pharmacy	1,575	27%	233	28%
Hospital/Health System, Inpatient Department	1,439	25%	149	18%
Independent Community Pharmacy	525	9%	111	13%
Hospital/Health System, Outpatient Department	425	7%	33	4%
Supermarket Pharmacy	395	7%	39	5%
Clinic-Based Pharmacy	217	4%	66	8%
Mass Merchandiser (i.e. Big Box Store)	216	4%	36	4%
Nursing Home/Long-Term Care	161	3%	23	3%
Benefit Administration	151	3%	4	0%
Academic Institution	99	2%	30	4%
Home Health/Infusion	75	1%	6	1%
Mail Service Pharmacy	68	1%	10	1%
Manufacturer	50	1%	1	0%
Small Chain Community Pharmacy	30	1%	6	1%
Wholesale Distributor	7	0%	1	0%
Other	411	7%	90	11%
Total	5,844	100%	838	100%
Did Not Have a Location	281		7950	

Large chain community pharmacies of more than 10 stores are the most common establishment type in Virginia, employing over a quarter of the state's pharmacist workforce.

Source: Va. Healthcare Workforce Data Center



Large chain community pharmacies of more than 10 stores were also the most common establishment type among pharmacists who had a secondary work location.

Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

Typical Time Allocation

Patient Care: 80%-89%
Administration: 1%-9%

Roles

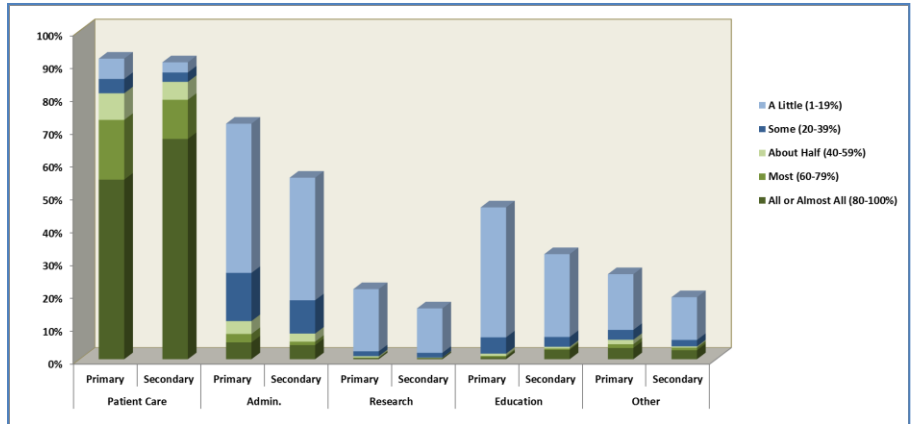
Patient Care: 73%
Administration: 8%
Education: 1%

Patient Care Pharmacists

Median Admin Time: 1%-9%
Ave. Admin Time: 1%-9%

Source: Va. Healthcare Workforce Data Center

A Closer Look:



Source: Va. Healthcare Workforce Data Center

A typical pharmacist spends most of her time in patient care activities. In fact, about three-quarters of pharmacists fill a patient care role, defined as spending at least 60% of her time in that activity.

Time Allocation										
Time Spent	Patient Care		Admin.		Research		Education		Other	
	Pri. Site	Sec. Site	Pri. Site	Sec. Site	Pri. Site	Sec. Site	Pri. Site	Sec. Site	Pri. Site	Sec. Site
All or Almost All (80-100%)	55%	67%	5%	4%	0%	0%	1%	3%	3%	3%
Most (60-79%)	18%	12%	3%	1%	0%	0%	0%	0%	1%	1%
About Half (40-59%)	8%	5%	4%	2%	0%	0%	1%	1%	1%	0%
Some (20-39%)	4%	3%	15%	10%	1%	1%	5%	3%	3%	2%
A Little (1-20%)	6%	3%	45%	37%	19%	14%	40%	25%	17%	13%
None (0%)	8%	10%	28%	45%	79%	84%	54%	68%	74%	81%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Retirement Expectations				
Expected Retirement Age	All		Over 50	
	#	%	#	%
Under age 50	276	5%	-	-
50 to 54	291	5%	0	0%
55 to 59	675	12%	169	8%
60 to 64	1,486	27%	572	27%
65 to 69	1,786	32%	802	38%
70 to 74	529	10%	290	14%
75 to 79	137	2%	97	5%
80 or over	73	1%	44	2%
I do not intend to retire	267	5%	113	5%
Total	5,521	100%	2,087	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Retirement Expectations

All Pharmacists

Under 65: 49%

Under 60: 22%

Pharmacists 50 and over

Under 65: 36%

Under 60: 8%

Time until Retirement

Within 2 years: 8%

Within 10 years: 25%

Half the workforce: By 2046

Source: Va. Healthcare Workforce Data Center

49% of Virginia’s pharmacists expect to retire before the age of 65, while 18% plan on working until at least age 70. Among pharmacists who are age 50 and over, 36% still plan on retiring by age 65, while over a quarter expect to work until at least age 70.

Within the next two years, 3% of Virginia’s pharmacists plan on leaving the profession and 2% expect to leave the state. Meanwhile, 9% of pharmacists expect to pursue additional educational opportunities, and 7% plan on increasing the number of hours that they devote to patients.

Future Plans

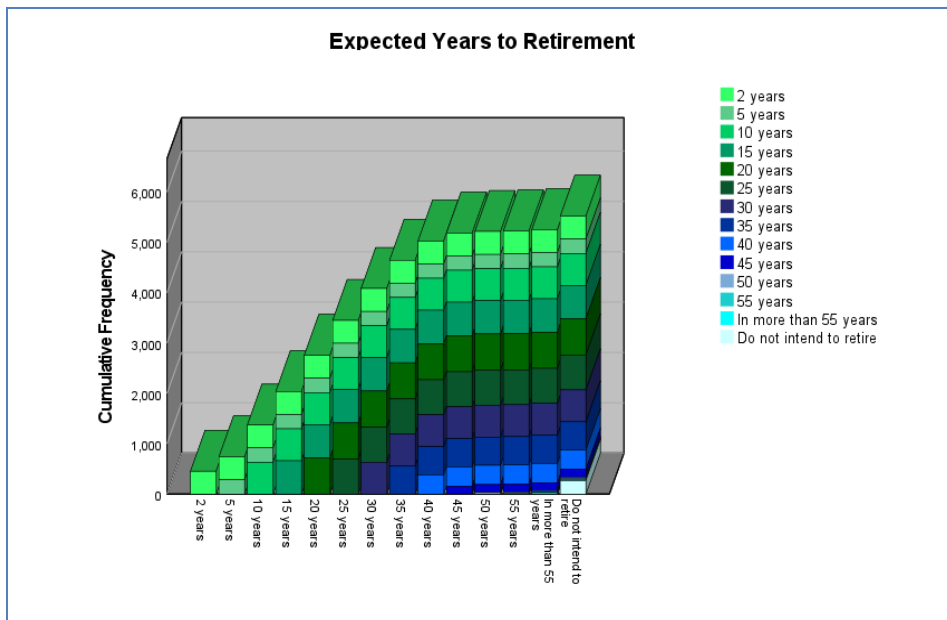
2 Year Plans:	#	%
Decrease Participation		
Leave Profession	235	3%
Leave Virginia	198	2%
Decrease Patient Care Hours	306	3%
Decrease Teaching Hours	25	0%
Increase Participation		
Increase Patient Care Hours	591	7%
Increase Teaching Hours	373	4%
Pursue Additional Education	699	8%
Return to Virginia’s Workforce	84	1%

Source: Va. Healthcare Workforce Data Center

By comparing retirement expectation to age, we can estimate the maximum years to retirement for pharmacists. Only 8% of pharmacists plan on retiring in the next two years, while 53% plan on retiring in the next ten years. Half of the current pharmacist workforce expect to retire by 2046.

Time to Retirement			
Expect to retire within . .	#	%	Cumulative %
2 years	454	8%	8%
5 years	284	5%	13%
10 years	634	11%	25%
15 years	664	12%	37%
20 years	719	13%	50%
25 years	695	13%	62%
30 years	634	11%	74%
35 years	561	10%	84%
40 years	382	7%	91%
45 years	158	3%	94%
50 years	32	1%	94%
55 years	9	0%	95%
In more than 55 years	27	0%	95%
Do not intend to retire	267	5%	100%
Total	5,521	100%	

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

Using these estimates, retirement will begin to reach 10% of the current workforce starting in 2026. Retirement will peak at 13% of the current workforce around 2041 before declining to under 10% of the current workforce again around 2061.

At a Glance:

FTEs

Total: 7,302
 FTEs/1,000 Residents²: 0.846
 Average: 0.85

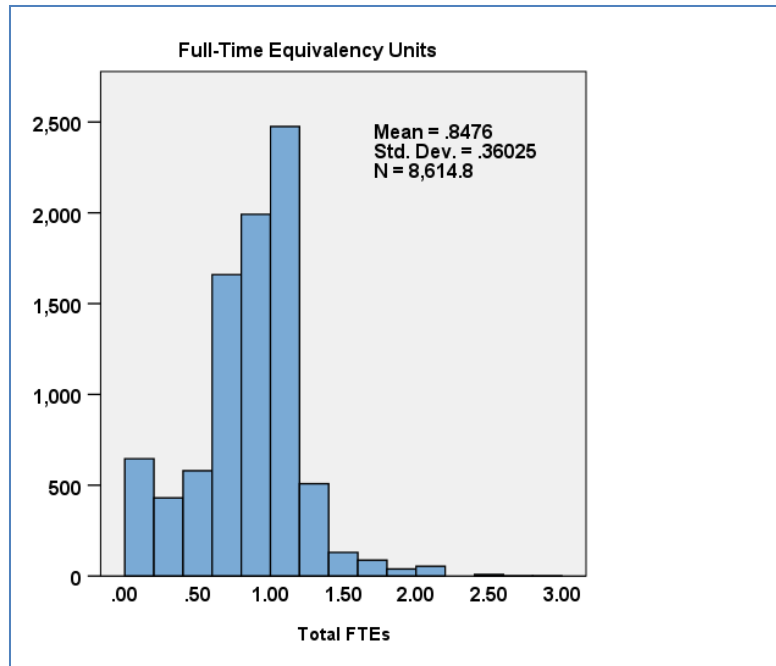
Age & Gender Effect

Age, Partial Eta³: Small
 Gender, Partial Eta³: Negligible

Partial Eta³ Explained:
 Partial Eta³ is a statistical measure of effect size.

Source: Va. Healthcare Workforce Data Center

A Closer Look:

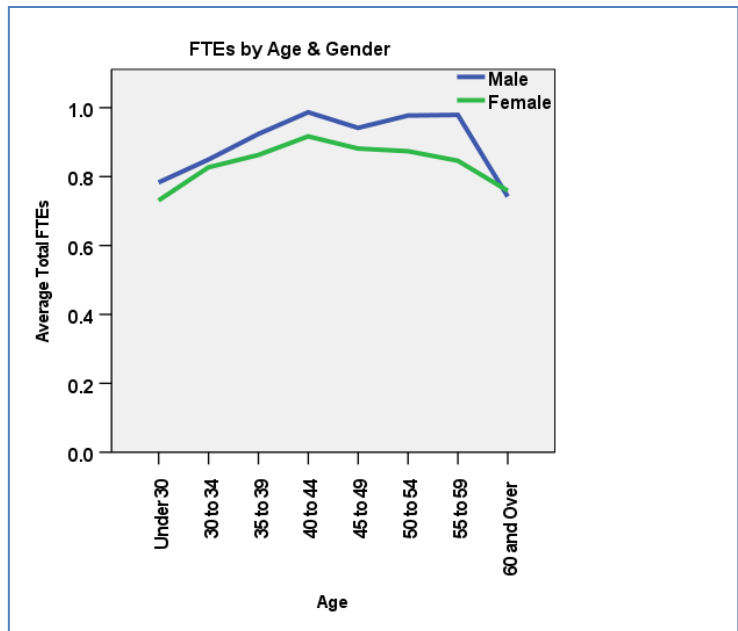


Source: Va. Healthcare Workforce Data Center

The typical pharmacist provided 0.85 FTEs in 2021, or about 34 hours per week for 52 weeks. Although FTEs appear to vary by both age and gender, statistical tests did not verify that a difference exists.³

Full-Time Equivalency Units		
Age		
	Average	Median
Under 30	0.74	0.67
30 to 34	0.81	0.82
35 to 39	0.87	0.83
40 to 44	0.95	1.01
45 to 49	0.90	0.90
50 to 54	0.90	0.90
55 to 59	0.90	0.92
60 and Over	0.73	0.64
Gender		
Male	0.88	0.97
Female	0.84	0.92

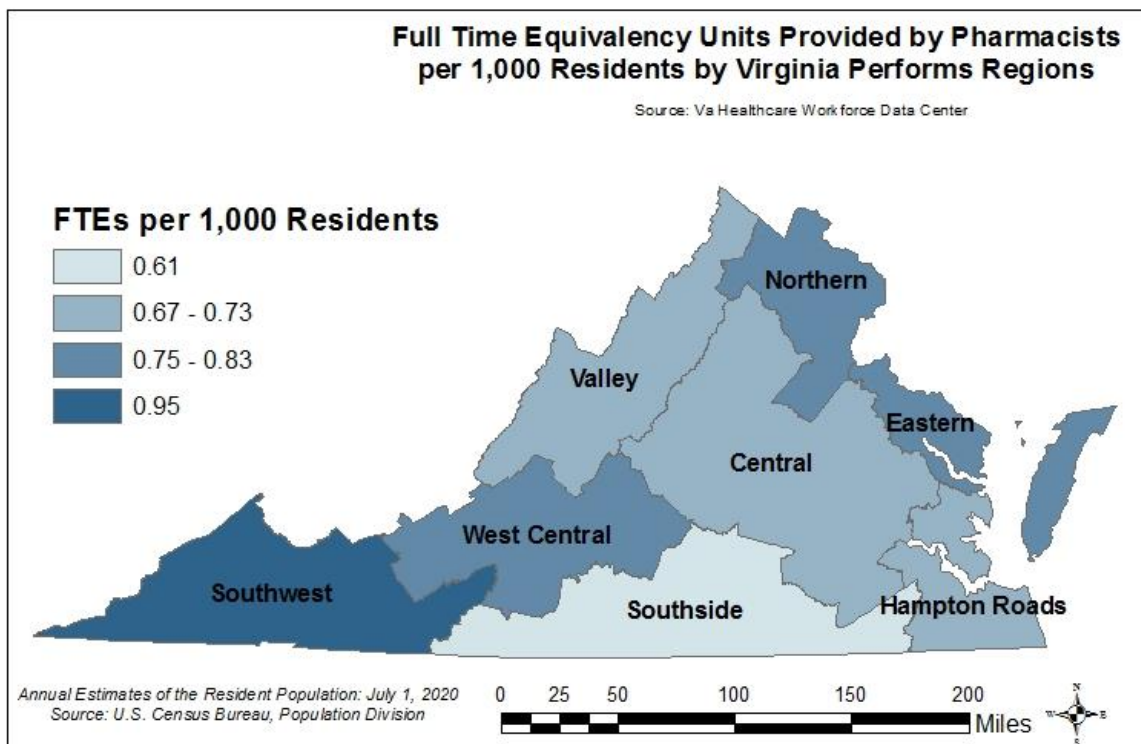
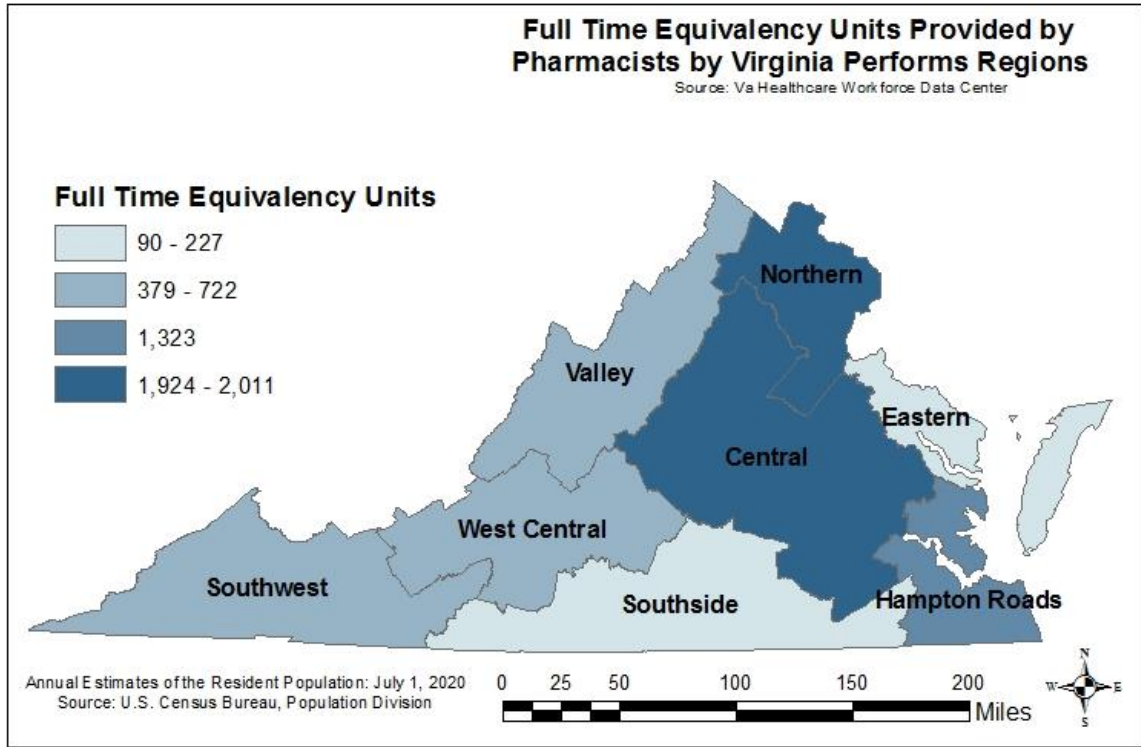
Source: Va. Healthcare Workforce Data Center

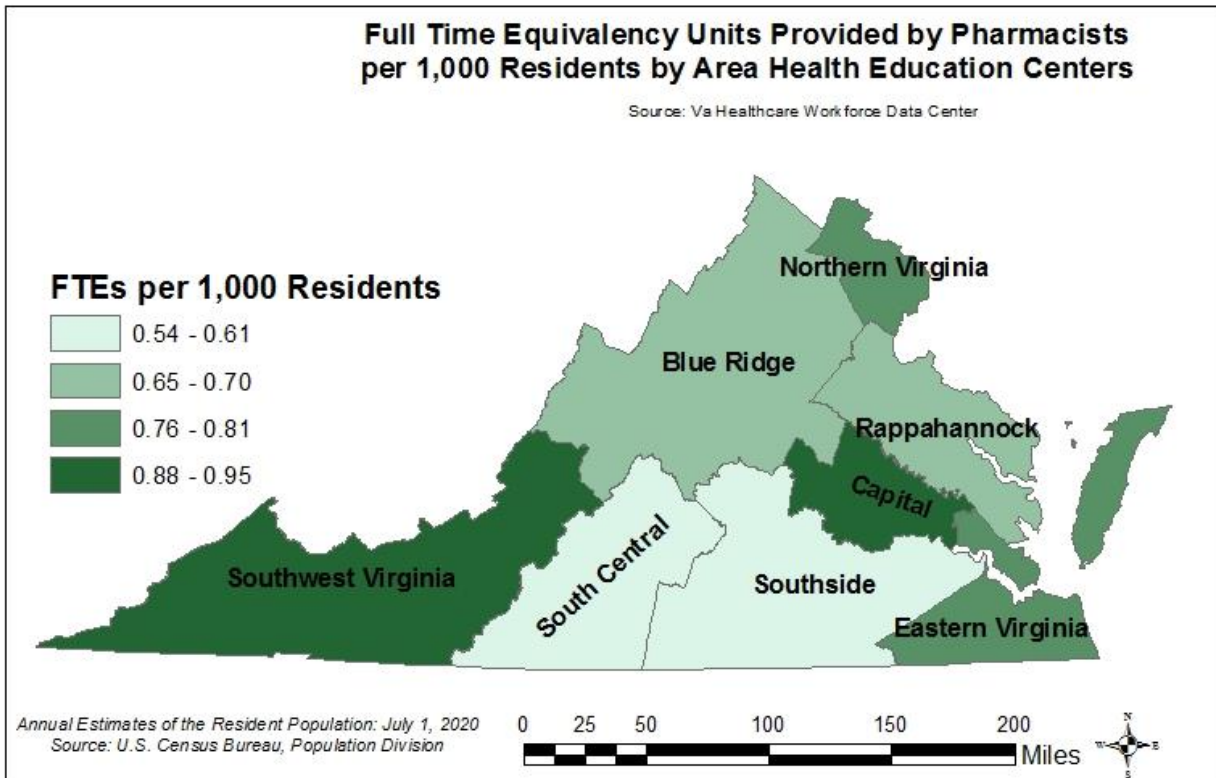
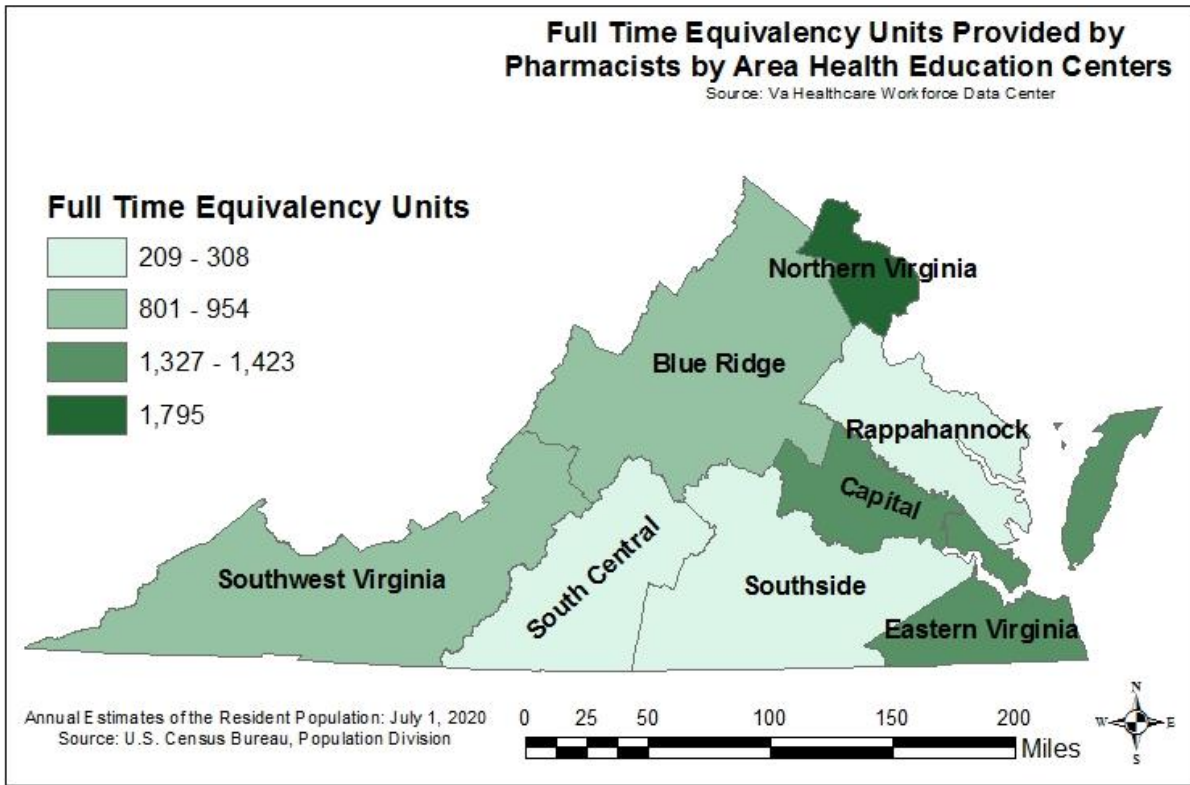


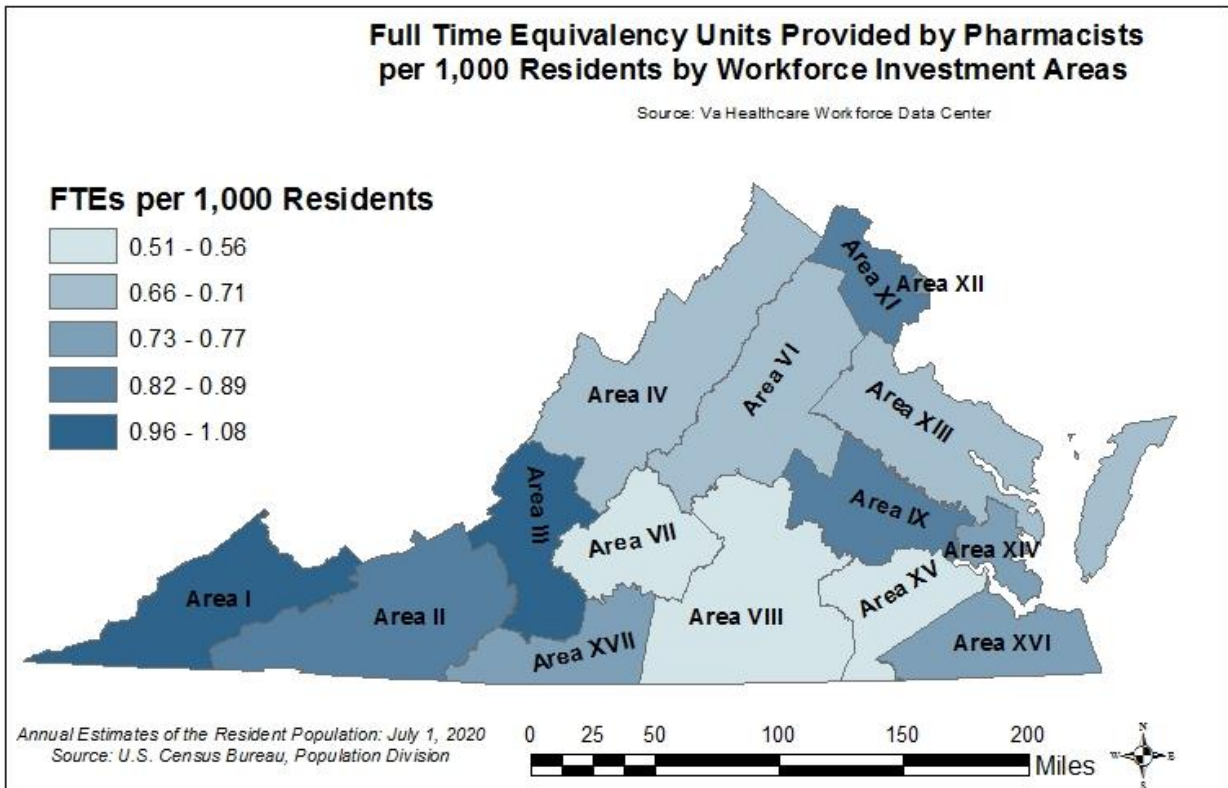
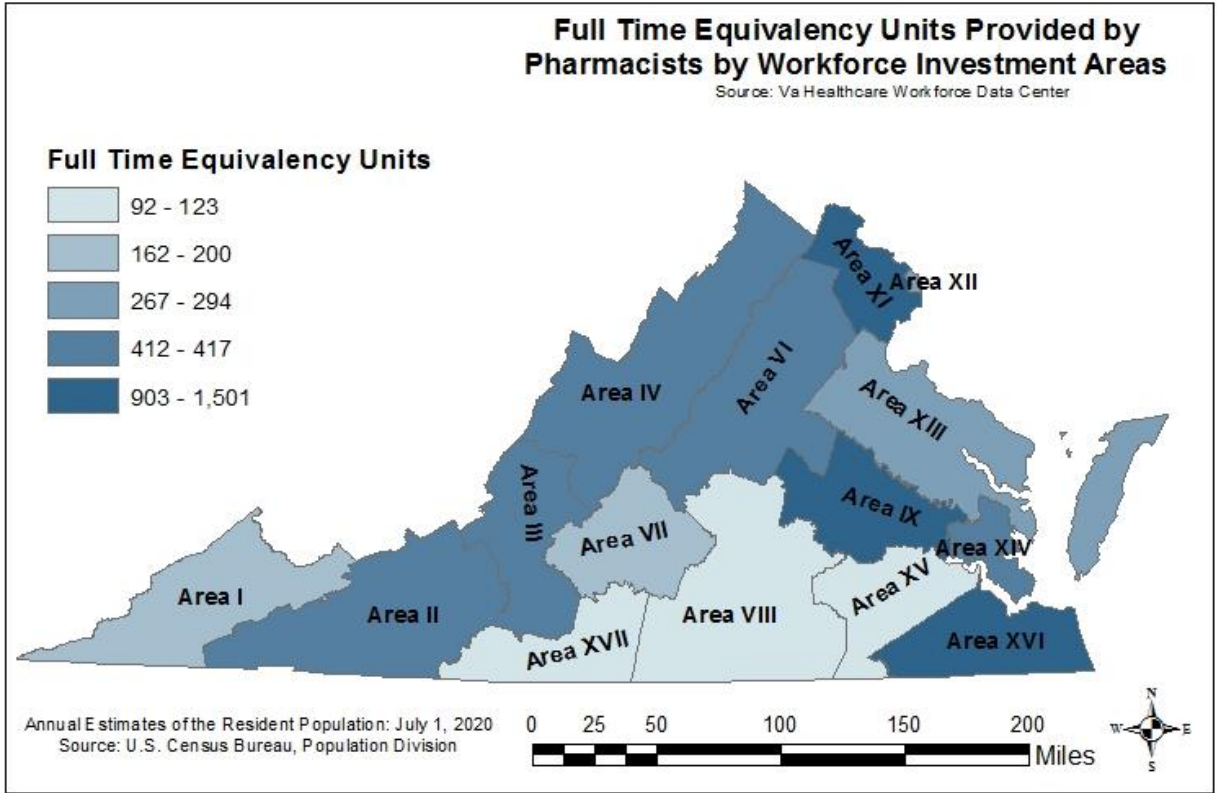
Source: Va. Healthcare Workforce Data Center

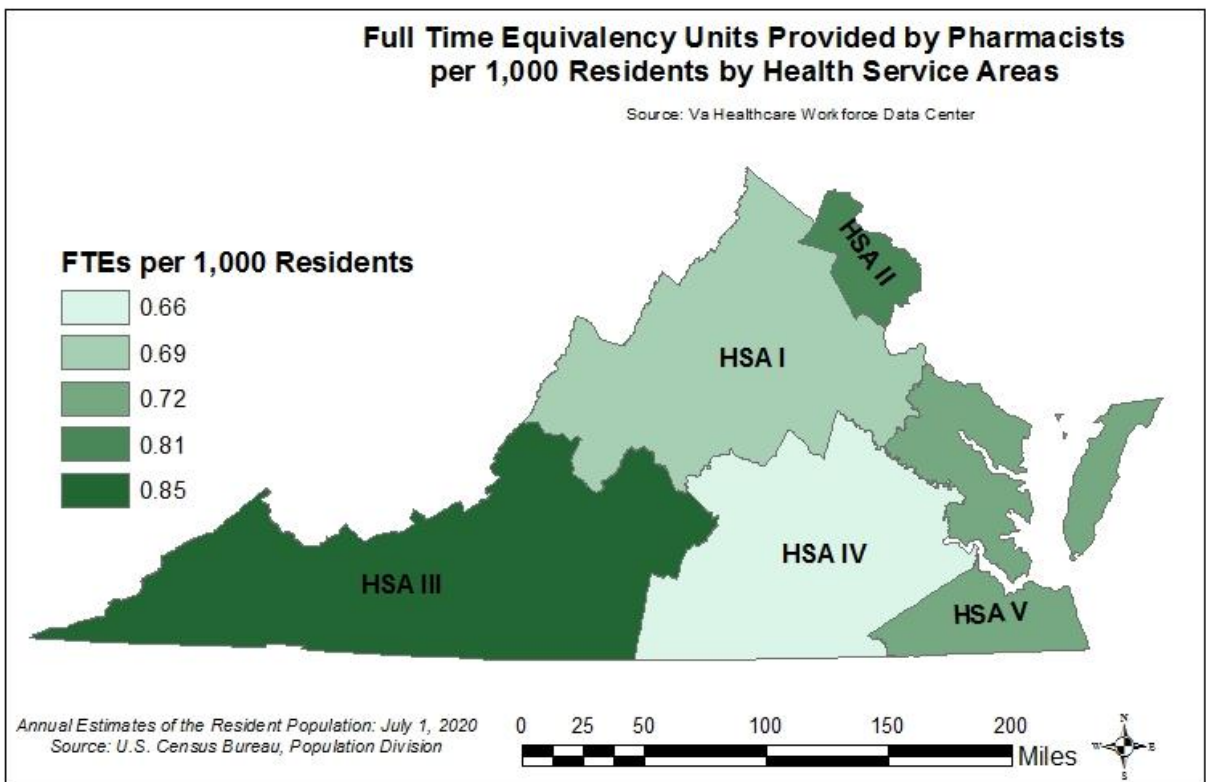
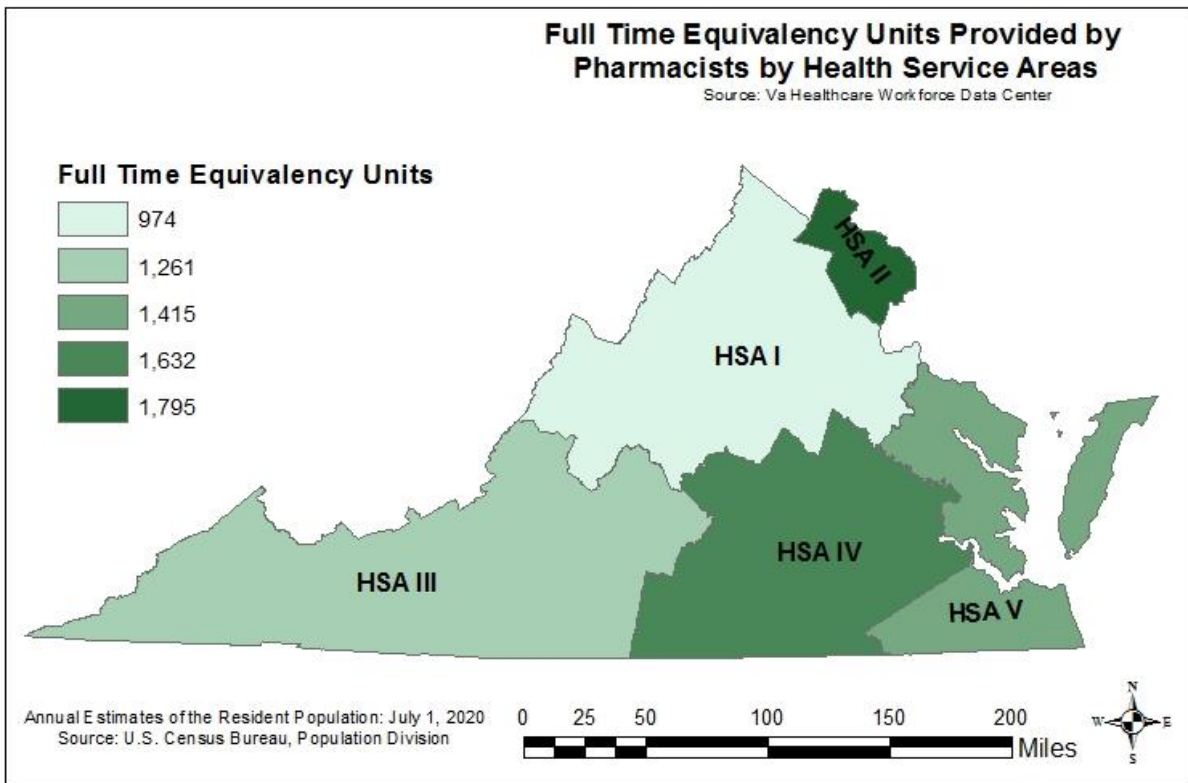
² Number of residents in 2020 was used as the denominator.

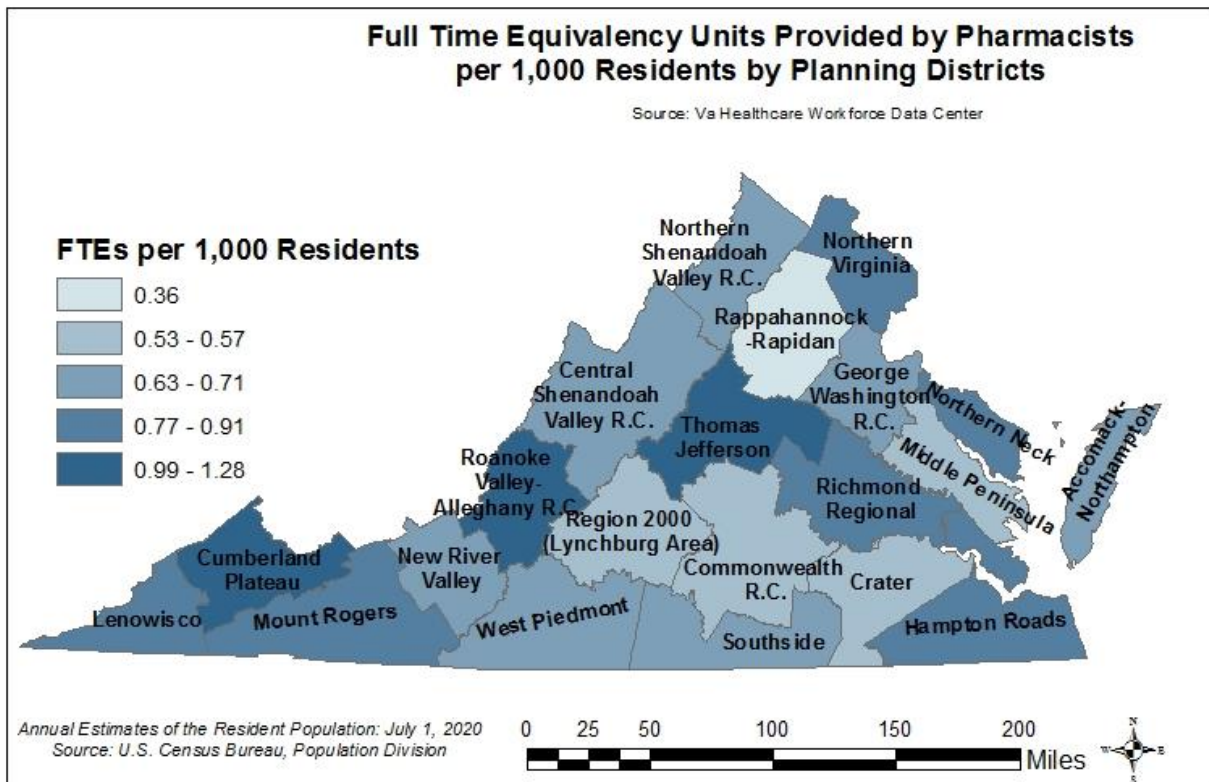
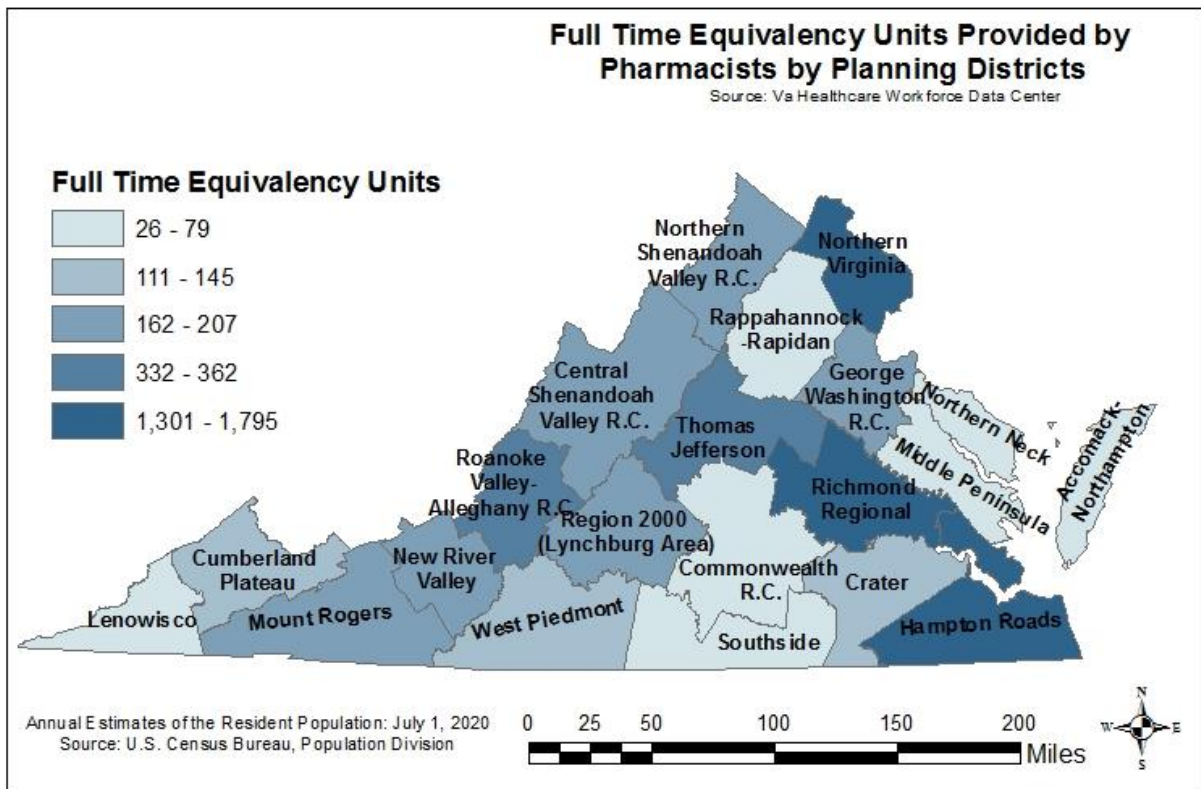
³ Due to assumption violations in Mixed between-within ANOVA (Levene's Test & Interaction effect are significant).











Appendix

Weights

Rural Status	Location Weight			Total Weight	
	#	Rate	Weight	Min	Max
Metro, 1 million+	6,724	92.79%	1.0777	1.0532	1.1445
Metro, 250,000 to 1 million	935	93.37%	1.0710	1.0467	1.1373
Metro, 250,000 or less	1,098	91.62%	1.0915	1.0666	1.1590
Urban pop 20,000+, Metro adj	117	93.16%	1.0734	1.0490	1.1398
Urban pop 20,000+, nonadj	0	NA	NA	NA	NA
Urban pop, 2,500-19,999, Metro adj	365	91.23%	1.0961	1.0712	1.1640
Urban pop, 2,500-19,999, nonadj	302	91.72%	1.0903	1.0654	1.1577
Rural, Metro adj	242	87.19%	1.1469	1.1208	1.2179
Rural, nonadj	130	91.54%	1.0924	1.0676	1.1601
Virginia border state/DC	2,910	89.00%	1.1236	1.0980	1.1931
Other US State	3,653	87.35%	1.1448	1.1187	1.2157

Source: Va. Healthcare Workforce Data Center

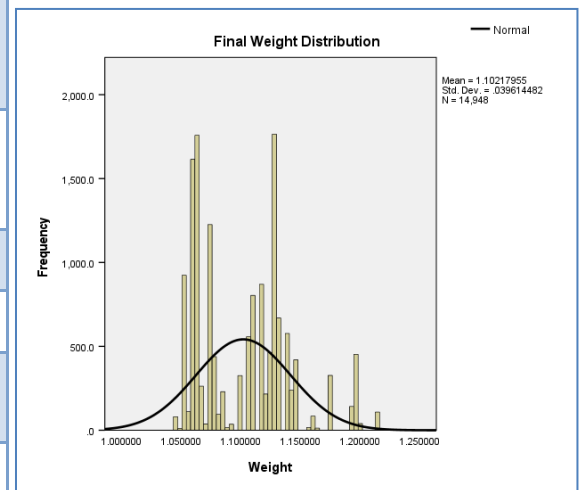
See the Methods section on the HWDC website for details on HWDC Methods:

www.dhp.virginia.gov/hwdc/

Final weights are calculated by multiplying the two weights and the overall response rate:

$$\text{Age Weight} \times \text{Rural Weight} \times \text{Response Rate} = \text{Final Weight.}$$

Overall Response Rate: 0.90725



Source: Va. Healthcare Workforce Data Center

Age	Age Weight			Total Weight	
	#	Rate	Weight	Min	Max
Under 30	927	85.44%	1.1705	1.1373	1.2179
30 to 34	2,475	91.15%	1.0971	1.0660	1.1416
35 to 39	2,829	91.83%	1.0889	1.0581	1.1331
40 to 44	2,201	92.23%	1.0842	1.0535	1.1282
45 to 49	1,899	92.84%	1.0771	1.0467	1.1208
50 to 54	1,893	91.92%	1.0879	1.0571	1.1321
55 to 59	1,482	92.17%	1.0849	1.0542	1.1289
60 and Over	2,769	86.75%	1.1528	1.1202	1.1995

Source: Va. Healthcare Workforce Data Center