
Virginia's Pharmacist Workforce: 2022

Healthcare Workforce Data Center

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15,296 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:	16,671
Virginia's Workforce:	8,965
FTEs:	7,394

Background

Rural Childhood:	32%
HS Degree in VA:	47%
Prof. Degree in VA:	48%

Current Employment

Employed in Prof.:	91%
Hold 1 Full-time Job:	73%
Satisfied?:	86%

Survey Response Rate

All Licensees:	92%
Renewing Practitioners:	97%

Education

Baccalaureate:	29%
Pharm.D./Professional:	71%

Job Turnover

Switched Jobs in 2022:	6%
Employed over 2 yrs.:	58%

Demographics

Female:	67%
Diversity Index:	54%
Median Age:	44

Finances

Median Inc.:	\$120k-\$130k
Health Benefits:	69%
Under 40 w/ Ed debt:	69%

Primary Roles

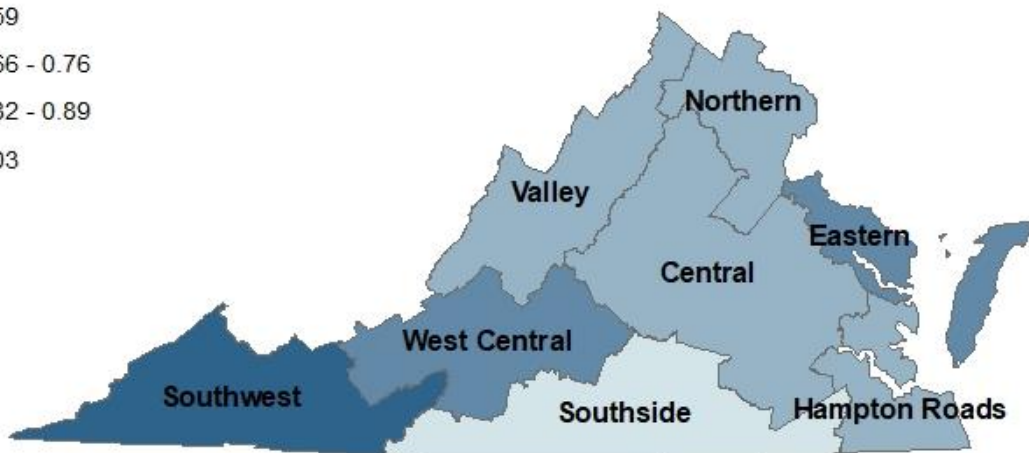
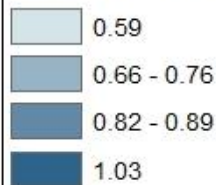
Patient Care:	73%
Administration:	8%
Education:	1%

Source: Va. Healthcare Workforce Data Center

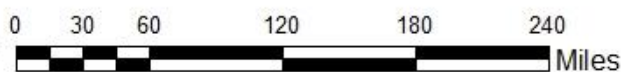
Full Time Equivalency Units by Pharmacists per 1,000 Residents by Virginia Performs Regions

Source: Va Healthcare Work force Data Center

FTEs per 1,000 Residents



Annual Estimates of the Resident Population: July 1, 2021
Source: U.S. Census Bureau, Population Division



Results in Brief

A total of 15,296 pharmacists voluntarily took part in the 2022 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 92% of the 16,671 pharmacists who are licensed in the state and 97% of renewing practitioners. The HWDC estimates that the 8,965 pharmacists in the Virginia's workforce during the survey period provided 7,394 full-time equivalency units (FTE).

The majority of Virginia's pharmacists are female, and the median age among those in the workforce is 44. Almost one-third of pharmacists grew up in a rural area, and close to 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. 71% of Virginia's pharmacist workforce have earned a doctorate or other professional degree as their highest educational attainment. Further, 42% of pharmacists currently carry educational debt. Furthermore, nearly seven out of ten of those under the age of 40 carry education debt. The median debt for those pharmacists with educational debt is between \$120,000 and \$130,000.

More than 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 2% were underemployed. The typical pharmacist earned between \$120,000 and \$130,000 in 2022. Around 86% of all pharmacists are satisfied with their current employment situation, including 44% who indicated that they are "very satisfied".

About 91% of all pharmacists work in the private sector, including 63% who work at a for-profit organization. Large chain pharmacies (i.e., pharmacies with more than 11 stores) were the most common working establishment type for Virginia's pharmacist workforce, employing 26% of all professionals. Hospital systems and smaller pharmacies were also common employers. About 48% of pharmacists expect to retire by the age of 65 and 7% of the current workforce expect to retire in the next two years. Half of the current workforce expect to retire by 2047.

Summary of Trends

The total number of licensed pharmacists has grown by almost 31% since 2013. Of these, the number working in the state workforce has also increased but the increase of 13% is modest by comparison. Additionally, the 8% increase in FTE provided in state by pharmacists between 2013 and 2022 is an even more modest increase.

The diversity index of Virginia's pharmacists increased from 47% in 2013 to 53% in 2021 and increased slightly in 2022 to 54%. The percentage of pharmacists who are female also continued increasing, from 62% in 2013 to 67% in 2022, though the percentage of female pharmacists did not change between 2021 and 2022. Median age has been relatively stable between 44 to 45 years in the past eight surveys. The percent under age 40, increased from 37% in 2013 to 40% in 2016, and stayed the same until 2021. Then, from 2021 to 2022 the percentage decreased from 40% to 39%.

Educational attainment continues to increase in the pharmacist workforce. In 2013, only 51% had a pharmacy doctorate compared to 71% in 2022. Alongside increasing educational attainment, the percent reporting educational debt has also increased from 35% in 2013 to 42% in 2021. Further, the median educational debt, which increased from \$90K-\$100K in 2013 to \$110K-\$120K in 2018, is now \$120K-\$130K.

The percent involuntarily unemployed has remained at 1% since 2021, which suggests a recovery of the impact of the pandemic. 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 2022 after increasing from \$110K-\$120K in 2013. However, the percent earning above \$140,000 increased from 17% in 2016 to 31% in 2022; only 12% were in that income range in 2013. Job satisfaction has increased to 86% in 2022 when it had previously been at its lowest level (83%) in 2021. This was driven by pharmacists who reported being very satisfied with their job who increased from 42% in 2021 to 44% in 2022.

Pharmacists intending to retire in the next decade increased from 22% in the pre-2017 surveys to 25% in 2022. Regarding future plans, only 7% intended to pursue additional education in 2022 compared to 13% in 2013.

A Closer Look:

Licensee Counts		
License Status	#	%
Renewing Practitioners	15,079	90%
New Licensees	811	5%
Non-Renewals	781	5%
All Licensees	16,671	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 92% of pharmacists who held a license at some point in 2022.

Statistic	Response Rates		Response Rate
	Non Respondents	Respondent	
By Age			
Under 30	102	705	87%
30 to 34	195	2,253	92%
35 to 39	197	2,709	93%
40 to 44	172	2,182	93%
45 to 49	132	1,824	93%
50 to 54	127	1,761	93%
55 to 59	98	1,416	94%
60 and Over	352	2,446	87%
Total	1,375	15,296	92%
New Licenses			
Issued in 2022	223	588	73%
Metro Status			
Non-Metro	88	1,063	92%
Metro	582	8,242	93%
Not in Virginia	705	5,991	89%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Licensed Pharmacists

Number:	16,671
New:	5%
Not Renewed:	5%

Survey Response Rates

All Licensees:	92%
Renewing Practitioners:	97%

Source: Va. Healthcare Workforce Data Center

Response Rates

Completed Surveys	15,296
Response Rate, all licensees	92%
Response Rate, Renewals	97%

Source: Va. Healthcare Workforce Data Center

Definitions

- 1. The Survey Period:** The survey was conducted in December 2022.
- 2. Target Population:** All pharmacists who held a Virginia license at some point in 2022.
- 3. 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 2022.

At a Glance:

Workforce

Pharmacist Workforce: 8,965
 FTEs: 7,394

Utilization Ratios

Licensees in VA Workforce: 54%
 Licensees per FTE: 2.25
 Workers per FTE: 1.21

Source: Va. Healthcare Workforce Data Center

Virginia's Pharmacist Workforce		
Status	#	%
Worked in Virginia in Past Year	8,715	97%
Looking for Work in Virginia	250	3%
Virginia's Workforce	8,965	100%
Total FTEs	7,394	
Licensees	16,671	

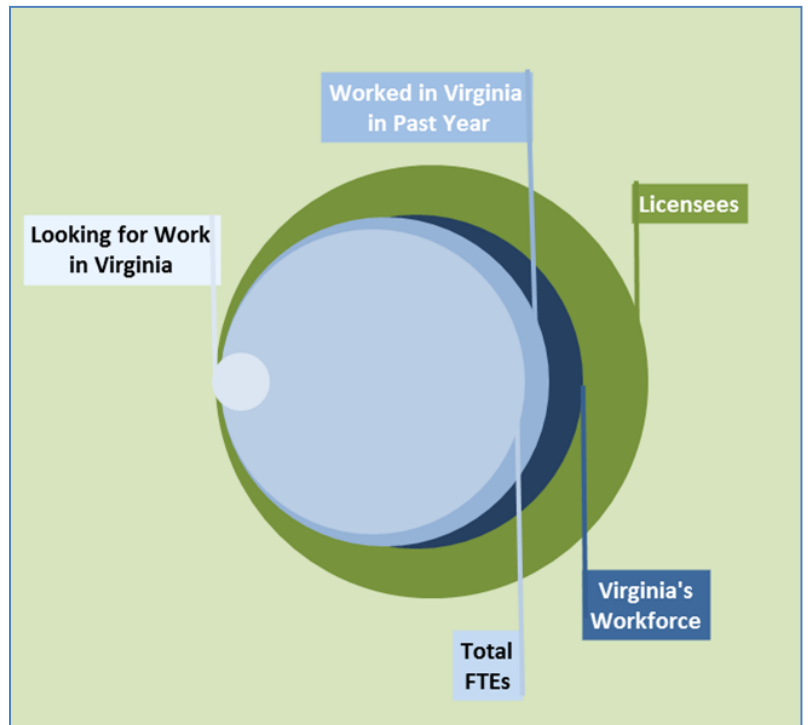
Source: Va. Healthcare Workforce Data Center

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	128	24%	398	76%	526	7%
30 to 34	300	28%	791	73%	1,091	15%
35 to 39	362	32%	786	69%	1,148	16%
40 to 44	257	28%	661	72%	918	13%
45 to 49	250	32%	524	68%	774	11%
50 to 54	221	28%	569	72%	789	11%
55 to 59	230	34%	445	66%	675	9%
60 +	590	49%	605	51%	1,195	17%
Total	2,339	33%	4,778	67%	7,117	100%

Source: Va. Healthcare Workforce Data Center

Race & Ethnicity					
Race/ Ethnicity	Virginia*	Pharmacists		Pharmacists Under 40	
	%	#	%	#	%
White	60%	4,543	64%	1,638	59%
Black	19%	816	11%	305	11%
Asian	7%	1,387	19%	647	23%
Other Race	0%	118	2%	43	2%
Two or more races	3%	123	2%	61	2%
Hispanic	10%	133	2%	66	2%
Total	100%	7,120	100%	2,760	100%

** Population data in this chart is from the U.S. Census, Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: July 1, 2021.

Source: Va. Healthcare Workforce Data Center

39% 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 just as diverse as Virginia's overall population.

At a Glance:

Gender

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

Age

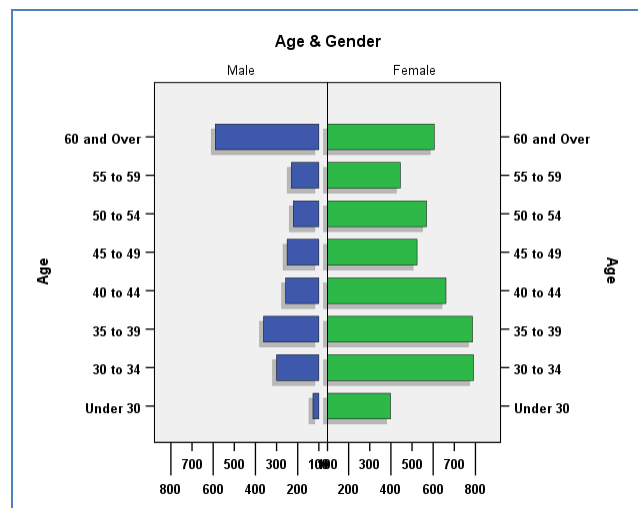
Median Age: 44
% Under 40: 39%
% 55+: 26%

Diversity

Diversity Index: 54%
Under 40 Div. Index: 58%

Source: Va. Healthcare Workforce Data Center

In a chance encounter between two pharmacists, there is a 54% 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 58%.



Source: Va. Healthcare Workforce Data Center

At a Glance:

Childhood

Urban Childhood: 16%
 Rural Childhood: 32%

Virginia Background

HS in Virginia: 47%
 Prof. Education in VA: 48%
 HS/Prof. Educ. in VA: 57%

Location Choice

% Rural to Non-Metro: 23%
 % Urban/Suburban to Non-Metro: 5%

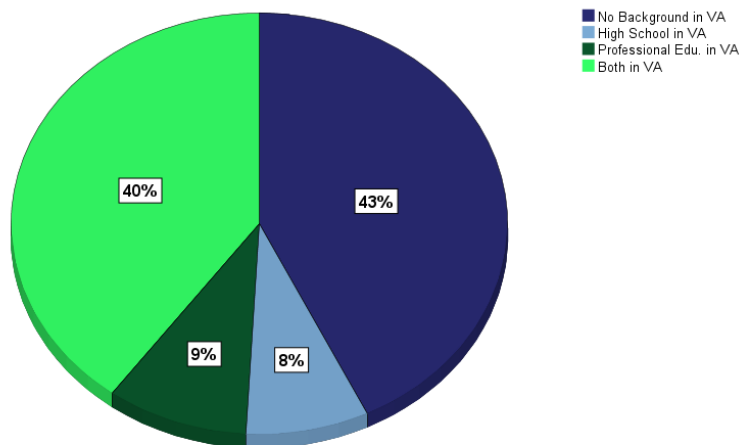
Source: Va. Healthcare Workforce Data Center

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+	21%	59%	20%
2	Metro, 250,000 to 1 million	53%	41%	6%
3	Metro, 250,000 or less	41%	46%	12%
Non-Metro Counties				
4	Urban pop 20,000+, metro adjacent	56%	34%	10%
6	Urban pop, 2,500-19,999, metro adjacent	61%	30%	8%
7	Urban pop, 2,500-19,999, non adjacent	89%	8%	4%
8	Rural, metro adjacent	57%	39%	4%
9	Rural, non adjacent	72%	23%	5%
Overall		32%	52%	16%

Source: Va. Healthcare Workforce Data Center

Educational Background in Virginia



32% of pharmacists grew up in self-described rural areas, and 23% 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	3,307	Virginia	3,339
2	Outside U.S./Canada	865	Pennsylvania	467
3	Pennsylvania	406	Outside U.S./Canada	337
4	New York	330	North Carolina	321
5	Maryland	209	Maryland	242
6	North Carolina	197	New York	232
7	West Virginia	189	West Virginia	201
8	New Jersey	140	Massachusetts	193
9	Ohio	131	Washington, D.C.	174
10	Florida	116	Tennessee	140

Source: Va. Healthcare Workforce Data Center

47% of Virginia's pharmacists received their high school degree in Virginia, and 48% received their initial professional degree in the state.

Among pharmacists who have been licensed in the past five years, 41% received their high school degree in Virginia, and 42% received their initial professional degree in the state.

Rank	Licensed in the Past 5 Years			
	High School	#	Professional School	#
1	Virginia	678	Virginia	678
2	Outside U.S./Canada	210	Pennsylvania	108
3	Pennsylvania	89	North Carolina	101
4	North Carolina	70	Maryland	81
5	New York	66	Tennessee	78
6	Maryland	65	Outside U.S./Canada	76
7	Florida	41	West Virginia	55
8	Ohio	34	New York	43
9	Tennessee	33	Massachusetts	39
10	West Virginia	32	Ohio	36

Source: Va. Healthcare Workforce Data Center

46% of Virginia's licensed pharmacists did not participate in Virginia's workforce in 2022. 92% of these professionals worked at some point in the past year, including 84% who currently work as pharmacists.

At a Glance:

Not in VA Workforce

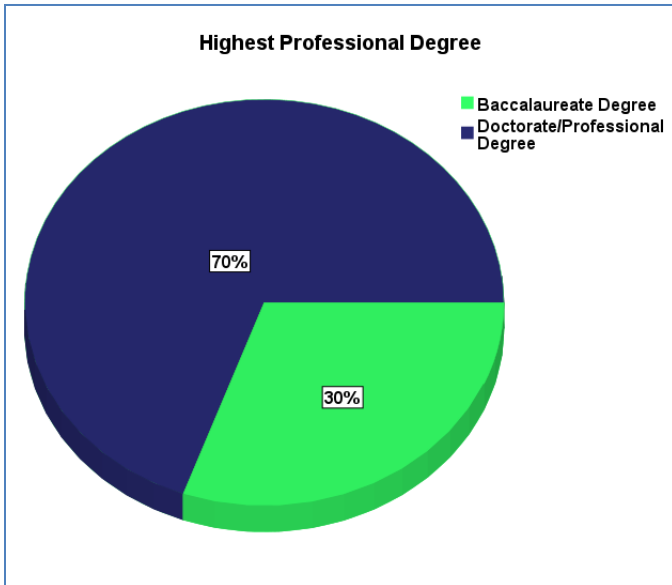
Total:	7,705
% of Licensees:	46%
Federal/Military:	8%
VA Border State/DC:	16%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Highest Professional Degree		
Degree	#	%
B.S. Pharmacy	1,968	29%
Pharm.D.	4,855	71%
Total	6,823	100%

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

At a Glance:

Education

B.S. Pharmacy: 29%

Pharm.D.: 71%

Educational Debt

Carry debt: 42%

Under age 40 w/ debt: 69%

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

Source: Va. Healthcare Workforce Data Center

71% of pharmacists hold a Doctorate in Pharmacy as their highest professional degree, while all remaining professionals have earned a Bachelor's degree in Pharmacy.

42% of pharmacists currently have educational debt, including 69% 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	3,258	58%	654	31%
\$20,000 or less	157	3%	55	3%
\$20,001-\$40,000	192	3%	58	3%
\$40,001-\$60,000	201	4%	89	4%
\$60,001-\$80,000	166	3%	79	4%
\$80,001-100,000	182	3%	108	5%
\$100,001-\$120,000	154	3%	105	5%
\$120,001-\$140,000	164	3%	114	5%
\$140,001-\$160,000	165	3%	126	6%
\$160,001-\$180,000	165	3%	127	6%
\$180,001-\$200,000	143	3%	116	5%
Over \$200,000	650	12%	502	24%
Total	5,597	100%	2,133	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):	12%
Community Pharmacy:	5%
Pharmacy Practice (Pre 1993):	3%

Source: Va. Healthcare Workforce Data Center

PGY1		
Residency	#	%
Pharmacy Practice (Post 1993)	1,041	12%
Community Pharmacy	434	5%
Pharmacy Practice (Pre 1993)	277	3%
Managed Care Pharmacy	35	<1%
Total	1,787	20%
PGY2		
Ambulatory Care	113	1%
Critical Care	61	1%
Internal Medicine/Cardiology	45	1%
Infectious Disease	40	<1%
Pediatrics	34	<1%
Oncology	33	<1%
Health-system Pharmacy Administration	32	<1%
Psychiatry	26	<1%
Drug Information	21	<1%
Solid Organ Transplant	20	<1%
Emergency Medicine	18	<1%
Pharmacotherapy	17	<1%
Geriatrics	17	<1%
Other	147	2%
At Least One	624	7%

Source: Va. Healthcare Workforce Data Center

Board Certifications

Certification	#	%
BPS-Pharmacotherapy	535	6%
BPS-Ambulatory Care	107	1%
BCGP-Geriatrics	83	1%
BPS-Oncology	41	<1%
BPS- Psychiatric	25	<1%
BPS- Nutrition	10	<1%
BPS-Nuclear Pharmacy	9	<1%
ABAT-Applied Toxicology	3	<1%
Other Board Certification	261	3%
At Least One Certification	976	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:	31%
Medication Management:	26%
Compounding:	21%

Disease Management

Anticoagulation:	15%
Diabetes:	1%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Disease Management in Collaborative Practice

	#	%
Anticoagulation	249	42%
Diabetes	239	40%
Hypertension	216	36%
Hypercholesterolemia	200	34%
Tobacco Cessation	162	27%
Asthma	128	22%
Travel Medications	74	12%
At least one	383	64%

Source: Va. Healthcare Workforce Data Center

64% of the 383 pharmacists with a collaborative practice agreement were involved in providing at least one disease management service; anticoagulation management was the most commonly reported by 42% of those with the agreement. 19% of pharmacists in the state workforce also utilized at least one of the listed statewide protocols.

Services Provided

Services	Primary		Secondary	
	#	%	#	%
Primary Service, Immunization	2,751	31%	2,751	31%
Primary Service, Medication Therapy Management	2,332	26%	305	3%
Primary Service, Compounding	1,895	21%	209	2%
Primary Service, Central Filling	1,077	12%	151	2%
Primary Service, Remote Order Processing	986	11%	103	1%
Primary Service, Collaborative Practice Agreement	594	7%	90	1%
At Least One	4,428	49%	2,987	33%

Source: Va. Healthcare Workforce Data Center

Statewide Protocols

	#	%
Naloxone	1,589	18%
Lowering Out-of-Pocket Expenses	356	4%
Epinephrine	272	3%
Emergency Contraception	198	2%
Hormonal Contraception	145	2%
Prenatal Vitamins	129	1%
At Least One	1,729	19%

Source: Va. Healthcare Workforce Data Center

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: 52%
60 or more: 5%
Less than 30: 12%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Current Work Status		
Status	#	%
Employed, capacity unknown	2	<1%
Employed in a pharmacy-related capacity	6,227	91%
Employed, NOT in a pharmacy-related capacity	277	4%
Not working, reason unknown	0	0%
Involuntarily unemployed	36	1%
Voluntarily unemployed	177	3%
Retired	136	2%
Total	6,855	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. 52% of pharmacists work between 40 and 49 hours per week, while 5% of pharmacy professionals work at least 60 hours per week.

Current Positions		
Positions	#	%
No Positions	349	5%
One Part-Time Position	909	14%
Two Part-Time Positions	128	2%
One Full-Time Position	4,895	73%
One Full-Time Position & One Part-Time Position	393	6%
Two Full-Time Positions	5	0%
More than Two Positions	34	1%
Total	6,713	100%

Source: Va. Healthcare Workforce Data Center

Current Weekly Hours		
Hours	#	%
0 hours	349	5%
1 to 9 hours	164	2%
10 to 19 hours	235	4%
20 to 29 hours	413	6%
30 to 39 hours	1,285	19%
40 to 49 hours	3,428	52%
50 to 59 hours	481	7%
60 to 69 hours	180	3%
70 to 79 hours	61	1%
80 or more hours	59	1%
Total	6,655	100%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Income		
Annual Income	#	%
Volunteer Work Only	51	1%
\$50,000 or less	376	8%
\$50,001-\$60,000	115	2%
\$60,001-\$70,000	99	2%
\$70,001-\$80,000	128	3%
\$80,001-\$90,000	128	3%
\$90,001-\$100,000	208	4%
\$100,001-\$110,000	448	9%
\$110,001-\$120,000	489	10%
\$120,001-\$130,000	713	14%
\$130,001-\$140,000	687	14%
\$140,001-\$150,000	552	11%
More than \$150,000	1,013	20%
Total	5,007	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

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

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

Satisfaction
Satisfied: 86%
Very Satisfied: 44%

Source: Va. Healthcare Workforce Data Center

Job Satisfaction		
Level	#	%
Very Satisfied	2895	44%
Somewhat Satisfied	2781	42%
Somewhat Dissatisfied	628	10%
Very Dissatisfied	292	4%
Total	6,596	100%

Source: Va. Healthcare Workforce Data Center

The typical pharmacist earned between \$120,000 and \$130,000 in 2022. Among pharmacists who received either an hourly wage or a salary as compensation at their primary work location, 69% received health insurance and 69% also had access to a retirement plan.

Employer-Sponsored Benefits			
Benefit	#	%	% of Wage/Salary Employees
Paid Vacation Leave	4,650	75%	78%
Retirement	4,149	67%	69%
Health Insurance	4,108	66%	69%
Dental Insurance	3,986	64%	67%
Paid Sick Leave	3,513	56%	59%
Group Life Insurance	2,886	46%	49%
Signing/Retention Bonus	521	8%	9%
Received At Least One Benefit	4,948	79%	82%

*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?	80	1%
Experience Voluntary Unemployment?	280	3%
Work Part-time or temporary positions, but would have preferred a full-time/permanent position?	220	2%
Work two or more positions at the same time?	723	8%
Switch employers or practices?	541	6%
Experienced at least 1	1,532	17%

Source: Va. Healthcare Workforce Data Center

1% of Virginia’s pharmacists experienced involuntary unemployment at some point in 2022. By comparison, Virginia’s average monthly unemployment rate was 2.9%.¹

Location Tenure				
Tenure	Primary		Secondary	
	#	%	#	%
Not Currently Working at this Location	129	2%	71	8%
Less than 6 Months	632	10%	118	13%
6 Months to 1 Year	625	10%	106	12%
1 to 2 Years	1,244	20%	168	19%
3 to 5 Years	1,225	19%	200	22%
6 to 10 Years	951	15%	111	12%
More than 10 Years	1,521	24%	128	14%
Subtotal	6,326	100%	902	100%
Did not have location	312		8,022	
Item Missing	2,327		40	
Total	8,965		8,965	

Source: Va. Healthcare Workforce Data Center

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: 2%

Stability

Switched: 6%
New Location: 23%
Over 2 years: 58%
Over 2 yrs, 2nd location: 49%

Employment Type

Salary or Wage: 94%

Source: Va. Healthcare Workforce Data Center

58% 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	2,865	50%
Hourly Wage	2,503	44%
By Contract	54	1%
Business/ Practice Income	245	4%
Unpaid	26	0%
Subtotal	5,692	100%

Source: Va. Healthcare Workforce Data Center

¹ As reported by the U.S. Bureau of Labor Statistics. The non-seasonally adjusted monthly unemployment rate fluctuated between a low of 2.5% and a high of 3.4%. The unemployment rate from December 2022 was still preliminary at the time of publication.

At a Glance:

Concentration

Top Region:	26%
Top 3 Regions:	71%
Lowest Region:	1%

Locations

2 or more (2021):	10%
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	1,643	26%	183	20%
Eastern	88	1%	16	2%
Hampton Roads	1,133	18%	162	18%
Northern	1,714	27%	206	23%
Southside	204	3%	32	4%
Southwest	367	6%	57	6%
Valley	371	6%	53	6%
West Central	678	11%	100	11%
Virginia Border State/DC	31	0%	34	4%
Other US State	58	1%	64	7%
Outside of the US	1	0%	1	0%
Total	6,288	100%	908	100%
Item Missing	2,364		35	

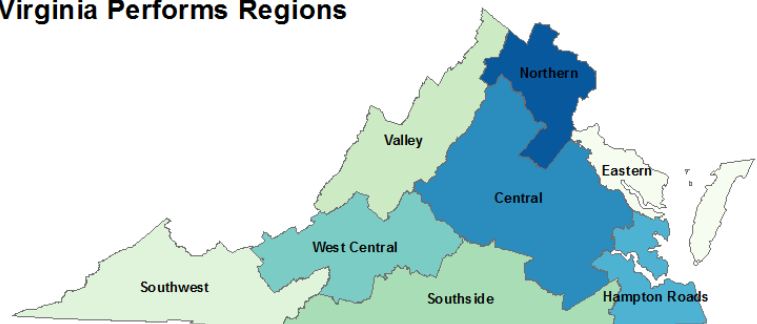
Source: Va. Healthcare Workforce Data Center

Locations	Number of Work Locations			
	Work Locations in 2022		Work Locations Now*	
	#	%	#	%
0	308	3%	340	5%
1	7,717	86%	5,373	82%
2	524	6%	513	8%
3	280	3%	227	4%
4	23	0%	15	0%
5	23	0%	12	0%
6 or More	90	1%	73	1%
Total	8,965	100%	6,554	100%

*At the time of survey completion, December 2022.

Source: Va. Healthcare Workforce Data Center

Virginia Performs Regions



Over the past year, 10% of Virginia's pharmacists worked at multiple locations.

A Closer Look:

Sector	Location Sector			
	Primary Location		Secondary Location	
	#	%	#	%
For-Profit	3,682	63%	575	68%
Non-Profit	1,604	28%	212	25%
State/Local Government	218	4%	33	4%
Veterans Administration	135	2%	2	0%
U.S. Military	104	2%	11	1%
Other Federal Gov't	88	2%	9	1%
Total	5,831	100%	842	100%
Did not have location	312		8,022	
Item Missing	2,821		101	

Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

Sector

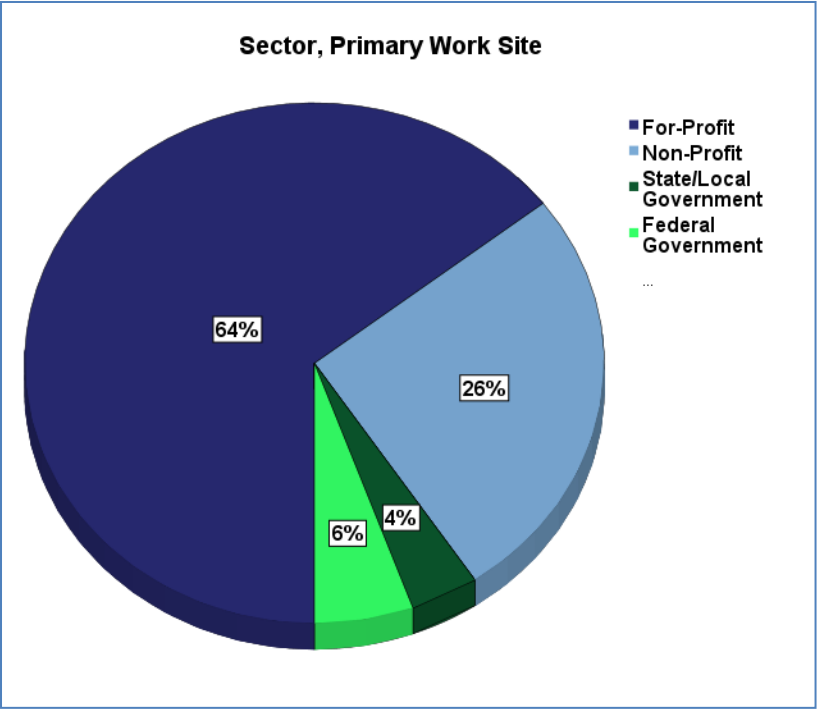
For Profit:	63%
Federal:	6%

Top Establishments

Large Chain Pharmacy: (11+ Stores)	26%
Hospital/Health System: (Inpatient)	26%
Independent Pharmacy: (1-4 Stores)	9%

Source: Va. Healthcare Workforce Data Center

91% of all pharmacists work in the private sector, including 63% who work at a for-profit company. Another 2% of pharmacists work for the federal government, while 4% work for a state or local government.

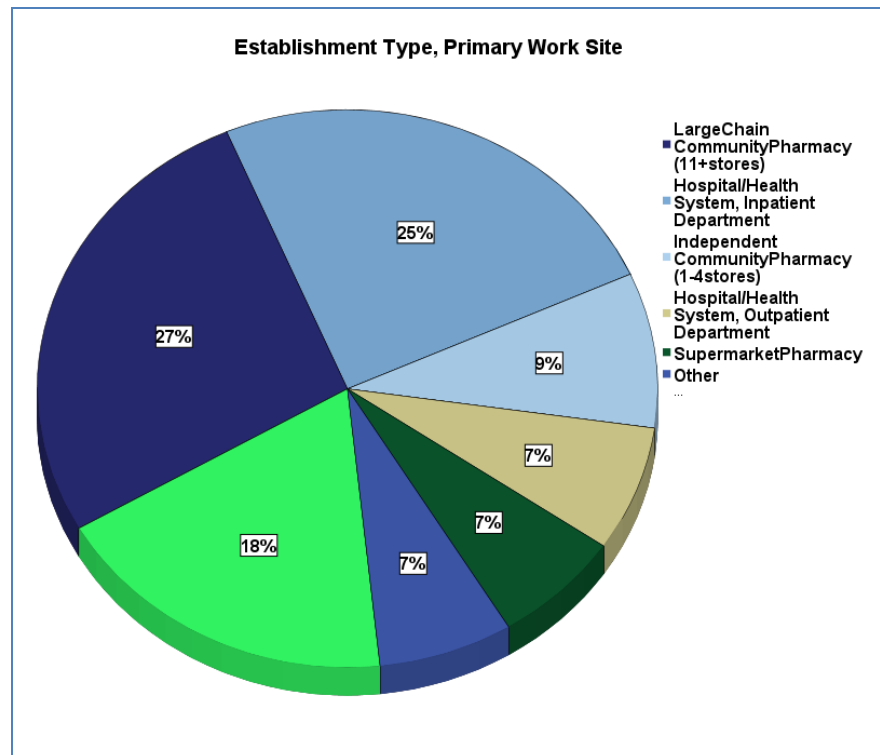


Source: Va. Healthcare Workforce Data Center

Top Location Types				
Establishment Type	Primary Location		Secondary Location	
	#	%	#	%
Large Chain Community Pharmacy	1,469	26%	204	25%
Hospital/Health System, Inpatient Department	1,466	26%	175	21%
Hospital/Health System, Outpatient Department	508	9%	102	12%
Supermarket Pharmacy	443	8%	41	5%
Clinic-Based Pharmacy	352	6%	46	6%
Mass Merchandiser (i.e., Big Box Store)	228	4%	28	3%
Nursing Home/Long-Term Care	193	3%	53	6%
Benefit Administration	173	3%	11	1%
Independent Community Pharmacy	158	3%	29	3%
Academic Institution	115	2%	27	3%
Home Health/Infusion	75	1%	8	1%
Mail Service Pharmacy	73	1%	10	1%
Manufacturer	58	1%	3	0%
Small Chain Community Pharmacy	30	1%	10	1%
Wholesale Distributor	5	0%	0	0%
Other	390	7%	83	10%
Total	5,736	100%	830	100%
Did Not Have a Location	312		8,022	

Large chain community pharmacies of more than 10 stores and hospital, health system, inpatient departments 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

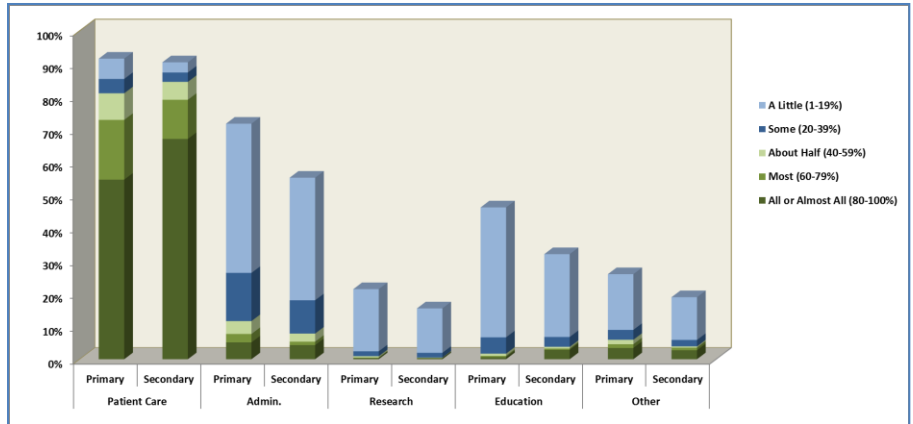
Patient Care: 73%
Administration: 8%
Education: 1%

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, almost three-quarters of pharmacists fill a patient care role, defined as spending at least 60% of their 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%	6%	3%	0%	0%	1%	3%	4%	2%
Most (60-79%)	18%	13%	2%	1%	0%	0%	0%	0%	1%	1%
About Half (40-59%)	8%	6%	4%	3%	0%	0%	1%	1%	1%	0%
Some (20-39%)	4%	3%	14%	9%	2%	2%	5%	3%	2%	2%
A Little (1-20%)	6%	3%	44%	42%	18%	12%	40%	26%	16%	12%
None (0%)	9%	9%	29%	41%	79%	86%	53%	68%	76%	83%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Retirement Expectations				
Expected Retirement Age	All		Over 50	
	#	%	#	%
Under age 50	228	4%	-	-
50 to 54	261	5%	0	0%
55 to 59	655	12%	158	8%
60 to 64	1,427	27%	521	26%
65 to 69	1,804	34%	817	40%
70 to 74	479	9%	282	14%
75 to 79	145	3%	88	4%
80 or over	86	2%	47	2%
I do not intend to retire	273	5%	108	5%
Total	5,357	100%	2,021	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Retirement Expectations

All Pharmacists

Under 65: 48%

Under 60: 21%

Pharmacists 50 and over

Under 65: 34%

Under 60: 8%

Time until Retirement

Within 2 years: 7%

Within 10 years: 25%

Half the workforce: By 2047

Source: Va. Healthcare Workforce Data Center

48% of Virginia’s pharmacists expect to retire before the age of 65, while 19% plan on working until at least age 70. Among pharmacists who are age 50 and over, 34% still plan on retiring by age 65, while 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, 7% of pharmacists expect to pursue additional educational opportunities, and 6% plan on increasing the number of hours that they devote to patients.

Future Plans

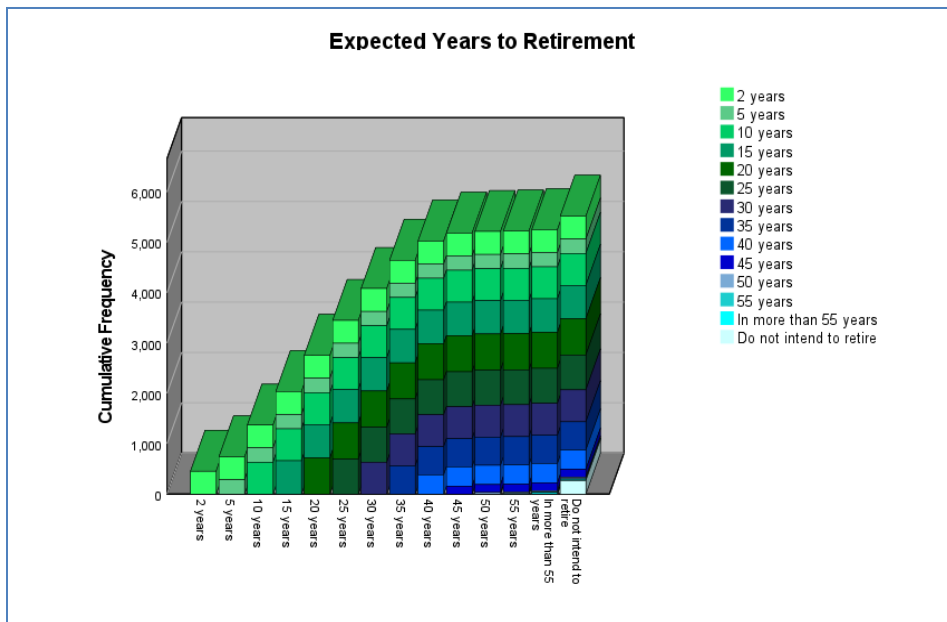
2 Year Plans:	#	%
Decrease Participation		
Leave Profession	225	3%
Leave Virginia	219	2%
Decrease Patient Care Hours	292	3%
Decrease Teaching Hours	31	0%
Increase Participation		
Increase Patient Care Hours	537	6%
Increase Teaching Hours	318	4%
Pursue Additional Education	655	7%
Return to Virginia’s Workforce	111	1%

Source: Va. Healthcare Workforce Data Center

By comparing retirement expectation to age, we can estimate the maximum years to retirement for pharmacists. Only 7% of pharmacists plan on retiring in the next two years, while 25% plan on retiring in the next ten years. More than half of the current pharmacist workforce is expected to retire by 2047.

Time to Retirement			
Expect to retire within . .	#	%	Cumulative %
2 years	387	7%	7%
5 years	253	5%	12%
10 years	685	13%	25%
15 years	672	13%	37%
20 years	662	12%	50%
25 years	650	12%	62%
30 years	682	13%	75%
35 years	524	10%	84%
40 years	366	7%	91%
45 years	124	2%	93%
50 years	40	1%	94%
55 years	18	0%	95%
In more than 55 years	21	0%	95%
Do not intend to retire	273	5%	100%
Total	5,357	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: 7,394
 FTEs/1,000 Residents²: 0.856
 Average: 0.85

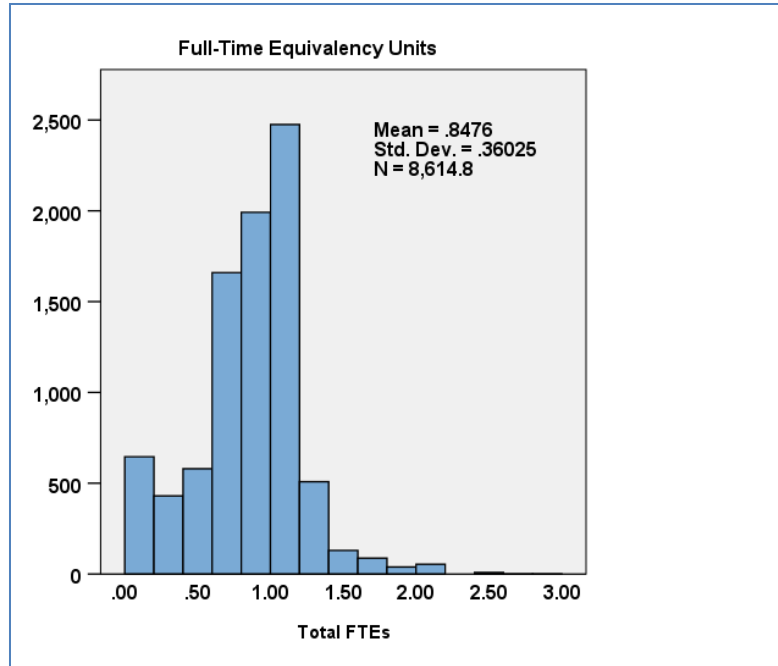
Age & Gender Effect

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:

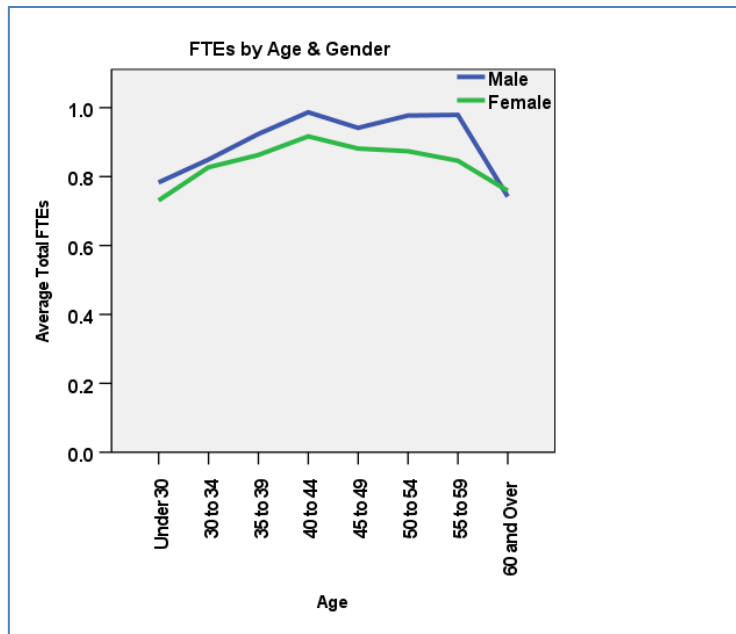


Source: Va. Healthcare Workforce Data Center

The typical pharmacist provided 0.85 FTEs in 2022, 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	0.86	0.96
30 to 34	0.84	0.82
35 to 39	0.85	0.84
40 to 44	0.83	0.83
45 to 49	0.85	0.78
50 to 54	0.96	1.08
55 to 59	0.86	0.83
60 and Over	0.81	0.97
Gender		
Male	0.88	0.97
Female	0.84	0.93

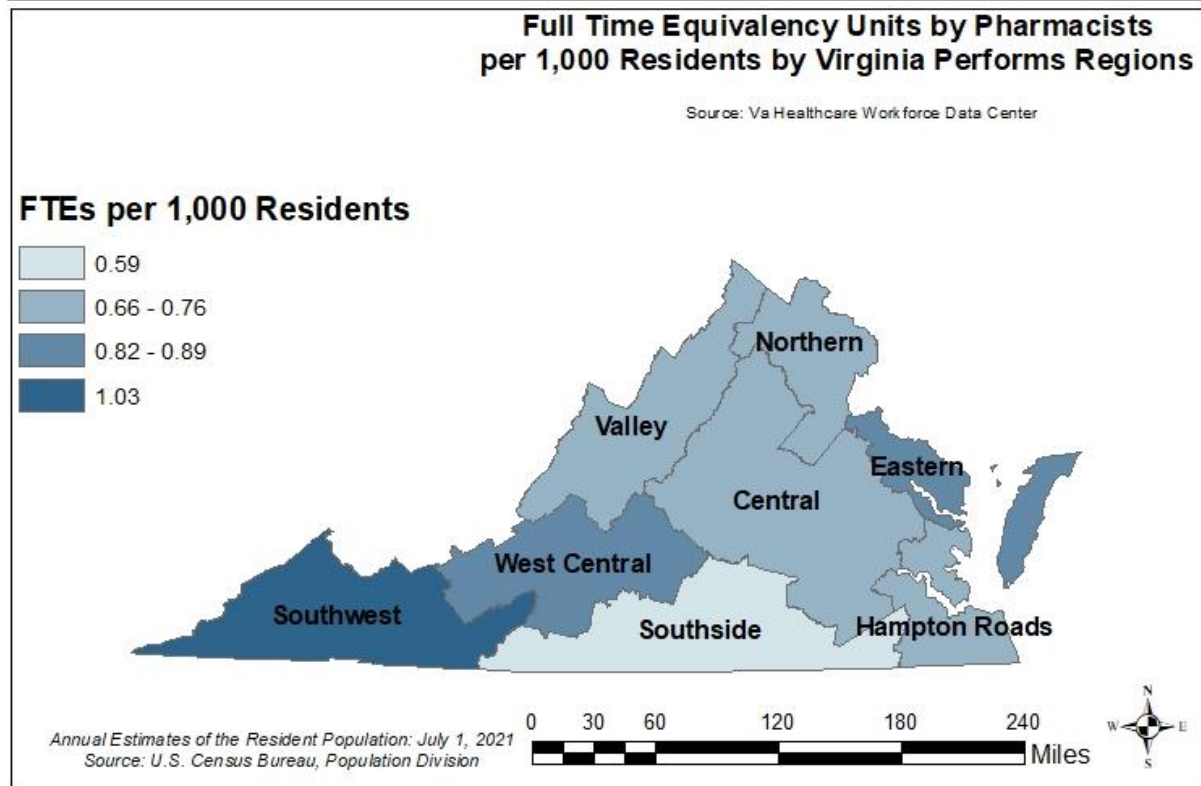
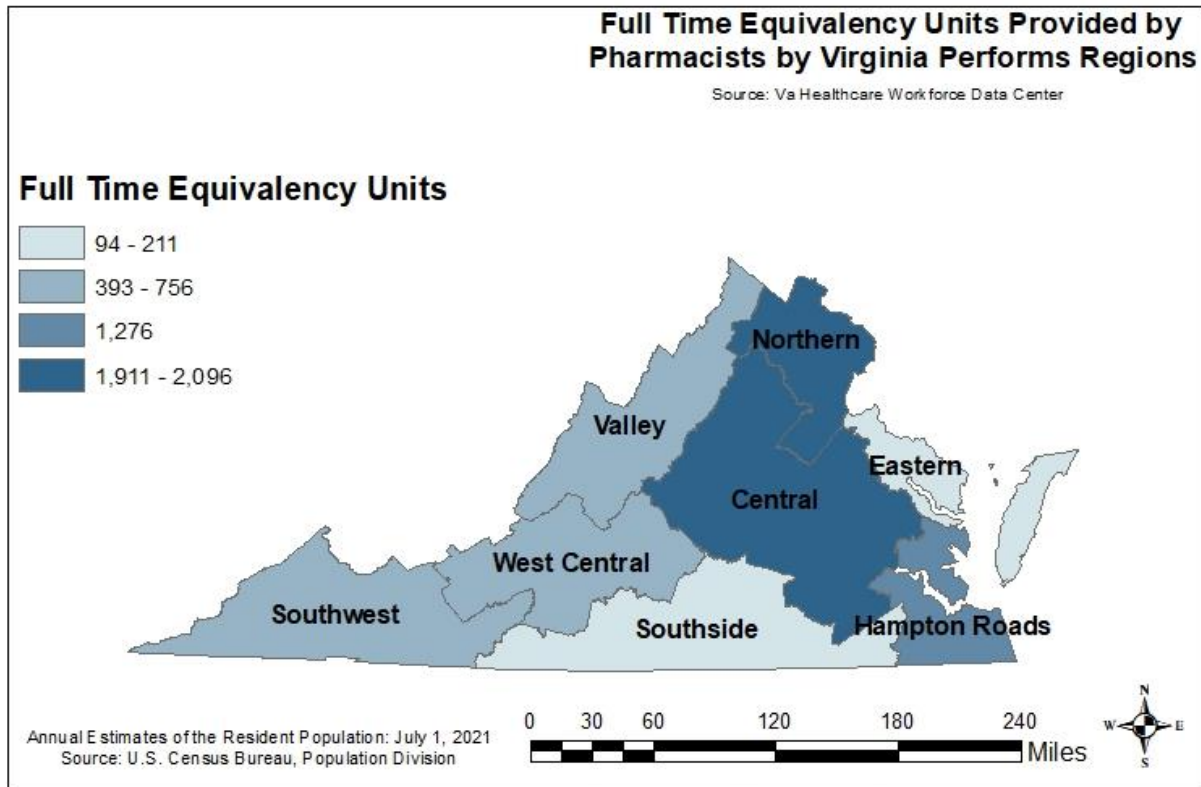
Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

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

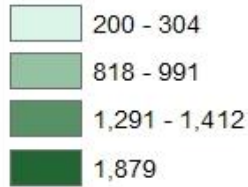
³ Due to assumption violations in Mixed between-within ANOVA (Levene's Test & Interaction effect are significant).



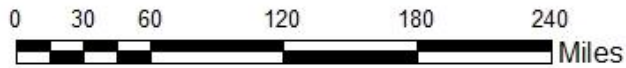
Full Time Equivalency Units Provided by Pharmacists by Area Health Education Centers

Source: Va Healthcare Work force Data Center

Full Time Equivalency Units



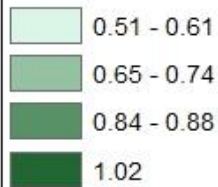
Annual Estimates of the Resident Population: July 1, 2021
Source: U.S. Census Bureau, Population Division



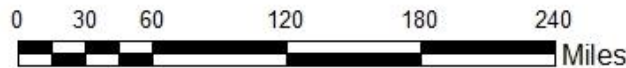
Full Time Equivalency Units Provided by Pharmacists per 1,000 Residents by Area Health Education Centers

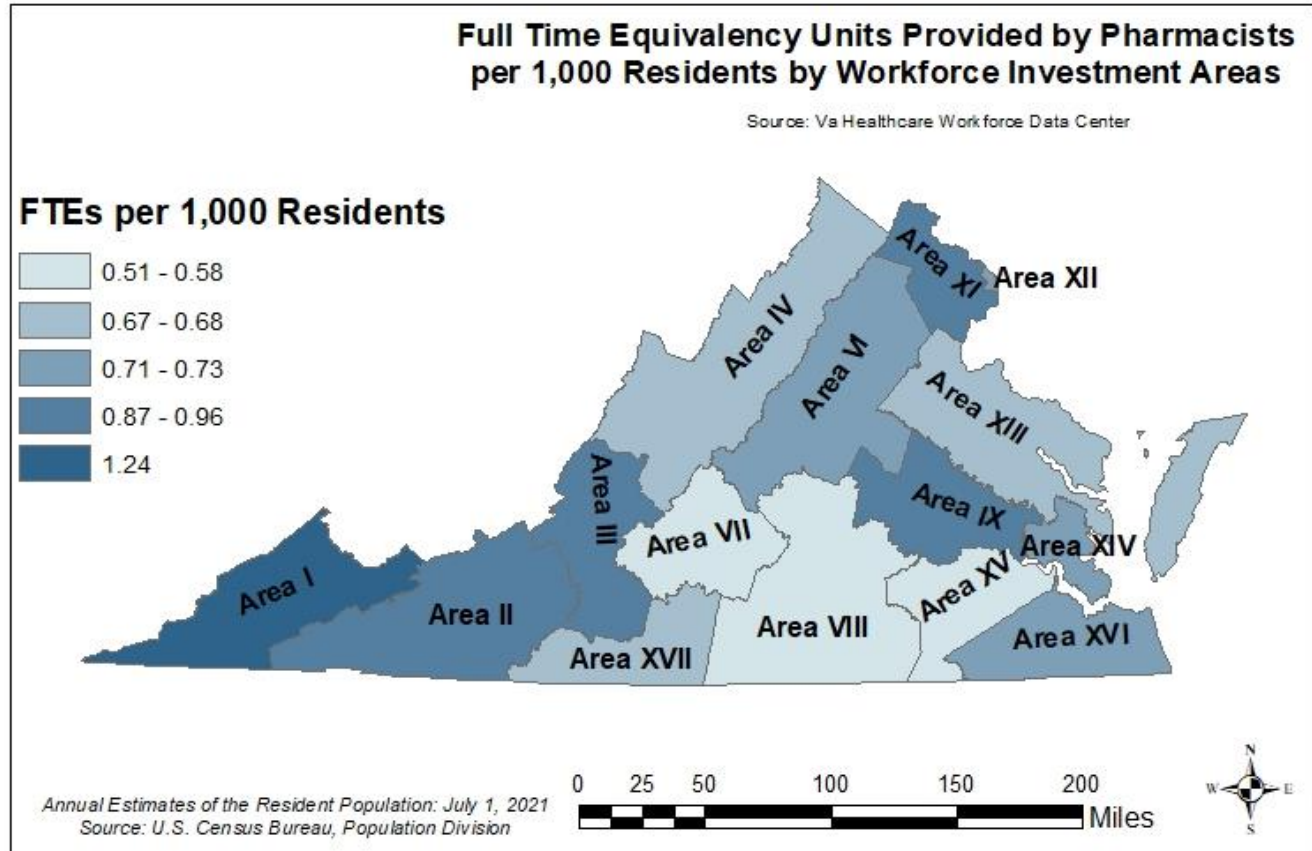
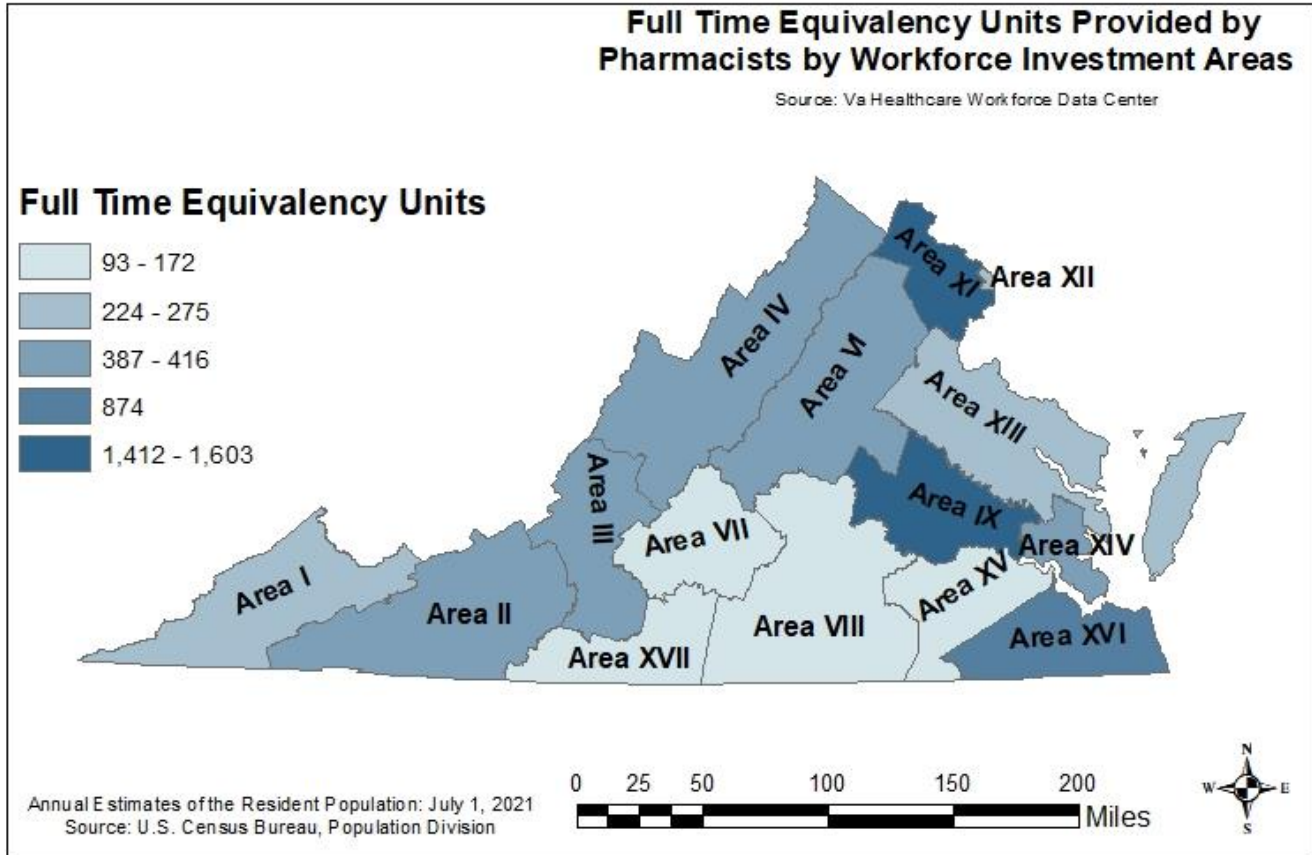
Source: Va Healthcare Work force Data Center

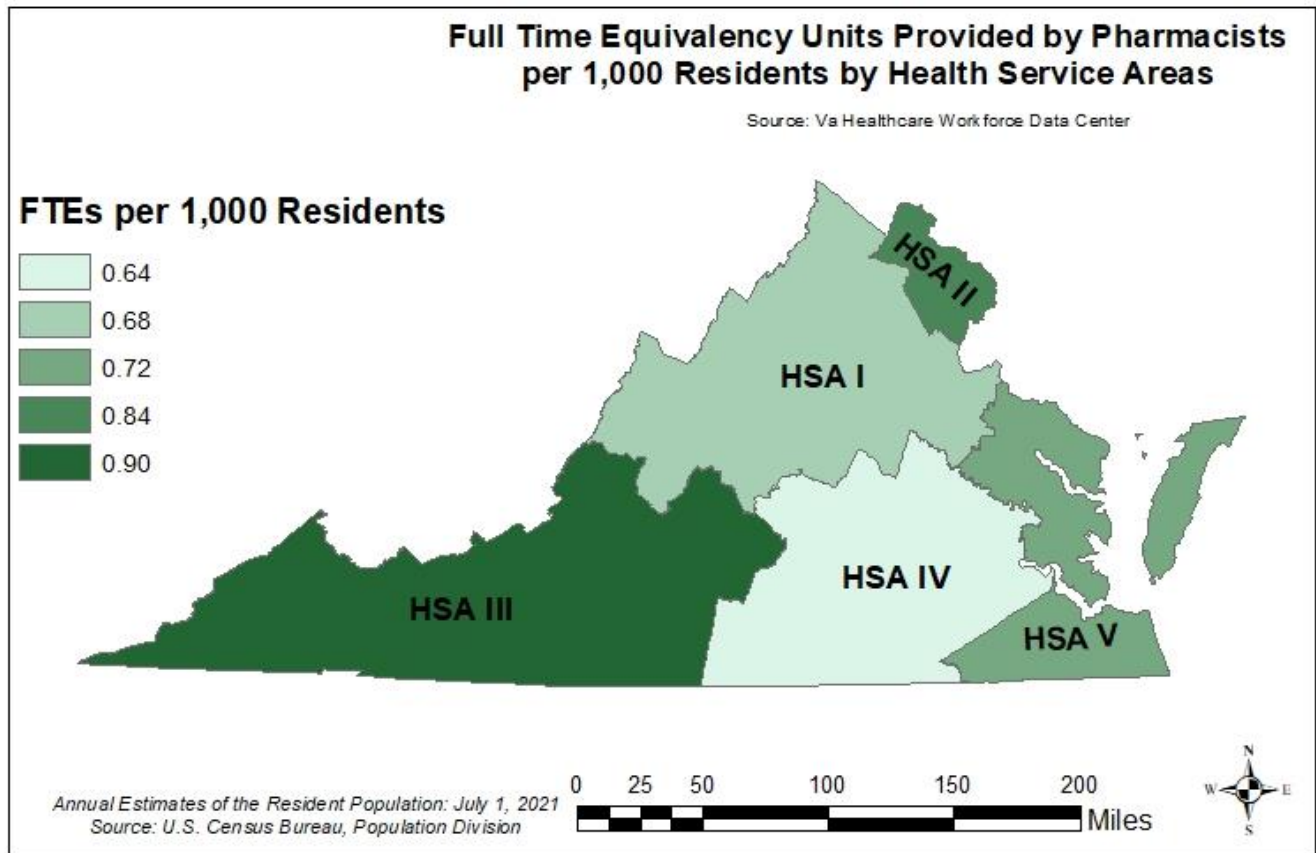
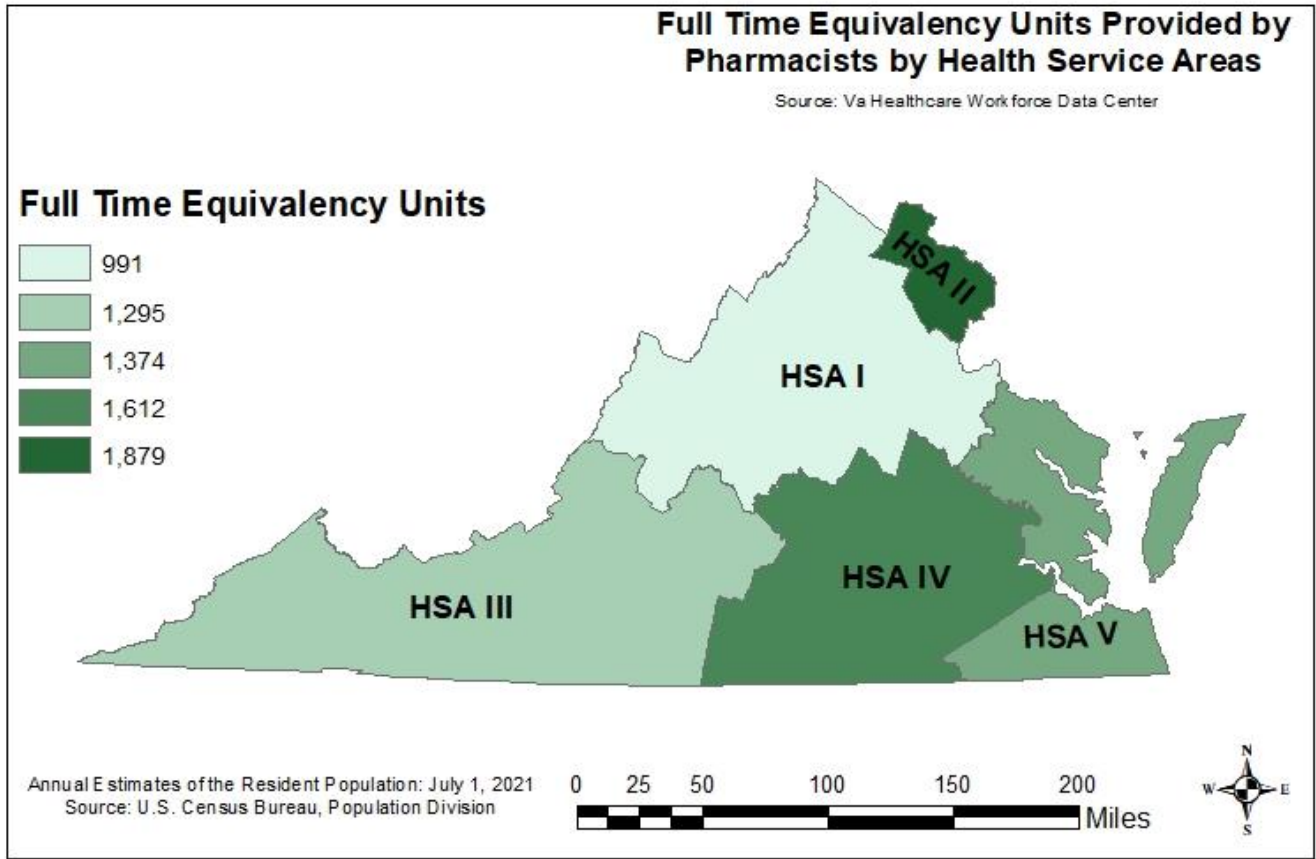
FTEs per 1,000 Residents



Annual Estimates of the Resident Population: July 1, 2021
Source: U.S. Census Bureau, Population Division



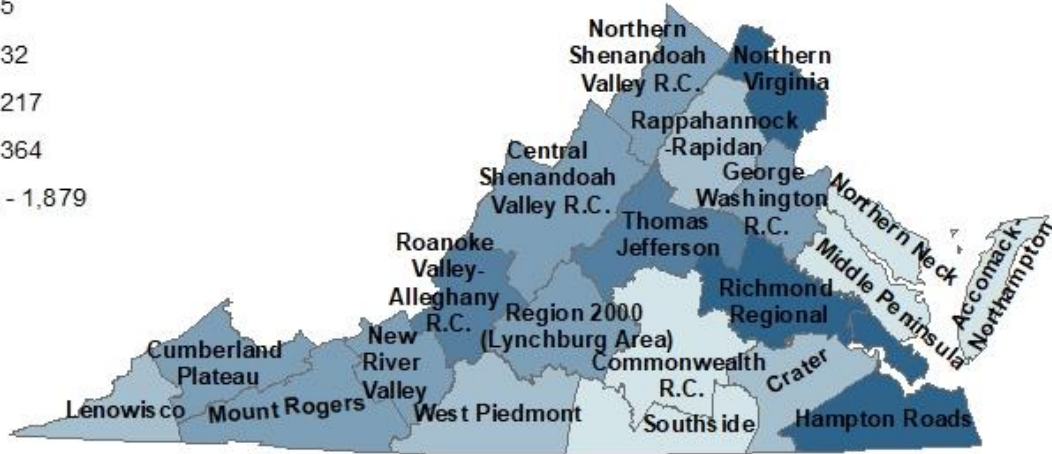
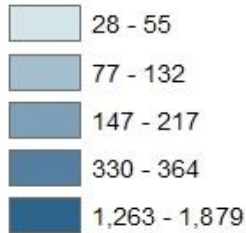




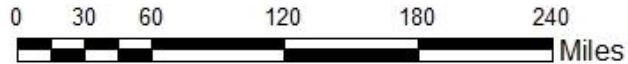
Full Time Equivalency Units Provided by Pharmacists by Planning Districts

Source: Va Healthcare Work force Data Center

Full Time Equivalency Units



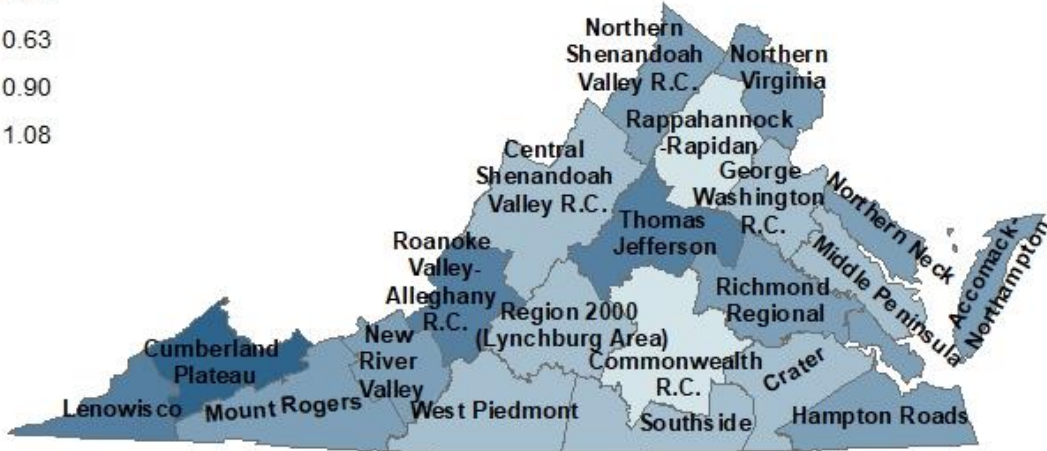
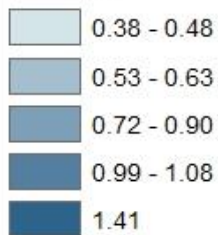
Annual Estimates of the Resident Population: July 1, 2021
Source: U.S. Census Bureau, Population Division



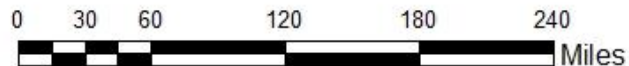
Full Time Equivalency Units Provided by Pharmacists per 1,000 Residents by Planning Districts

Source: Va Healthcare Work force Data Center

FTEs per 1,000 Residents



Annual Estimates of the Resident Population: July 1, 2021
Source: U.S. Census Bureau, Population Division



Appendix

Weights

Rural Status	Location Weight			Total Weight	
	#	Rate	Weight	Min	Max
Metro, 1 million+	6,760	93.43%	1.0703	1.0500	1.1241
Metro, 250,000 to 1 million	952	93.17%	1.0733	1.0529	1.1272
Metro, 250,000 or less	1,112	93.44%	1.0703	1.0499	1.1241
Urban pop 20,000+, Metro adj	119	94.12%	1.0625	1.0423	1.1159
Urban pop 20,000+, nonadj	0	NA	NA	NA	NA
Urban pop, 2,500-19,999, Metro adj	358	92.74%	1.0783	1.0578	1.1325
Urban pop, 2,500-19,999, nonadj	302	92.05%	1.0863	1.0657	1.1409
Rural, Metro adj	242	90.91%	1.1000	1.0791	1.1553
Rural, nonadj	130	93.08%	1.0744	1.0540	1.1284
Virginia border state/DC	2,948	90.88%	1.1004	1.0795	1.1557
Other US State	3,748	88.37%	1.1316	1.1102	1.1885

Source: Va. Healthcare Workforce Data Center

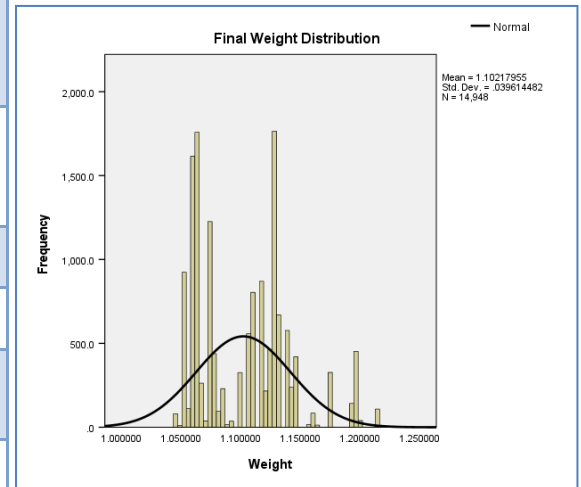
See the Methods section on the HWDC website for details on HWDC Methods:

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: 0.9175



Source: Va. Healthcare Workforce Data Center

Age	Age Weight			Total Weight	
	#	Rate	Weight	Min	Max
Under 30	807	87.36%	1.1447	1.1159	1.1885
30 to 34	2,448	92.03%	1.0866	1.0592	1.1282
35 to 39	2,906	93.22%	1.0727	1.0458	1.1138
40 to 44	2,354	92.69%	1.0788	1.0517	1.1202
45 to 49	1,956	93.25%	1.0724	1.0454	1.1134
50 to 54	1,888	93.27%	1.0721	1.0452	1.1132
55 to 59	1,514	93.53%	1.0692	1.0423	1.1102
60 and Over	2,798	87.42%	1.1439	1.1152	1.1877

Source: Va. Healthcare Workforce Data Center