

Northern Virginia's

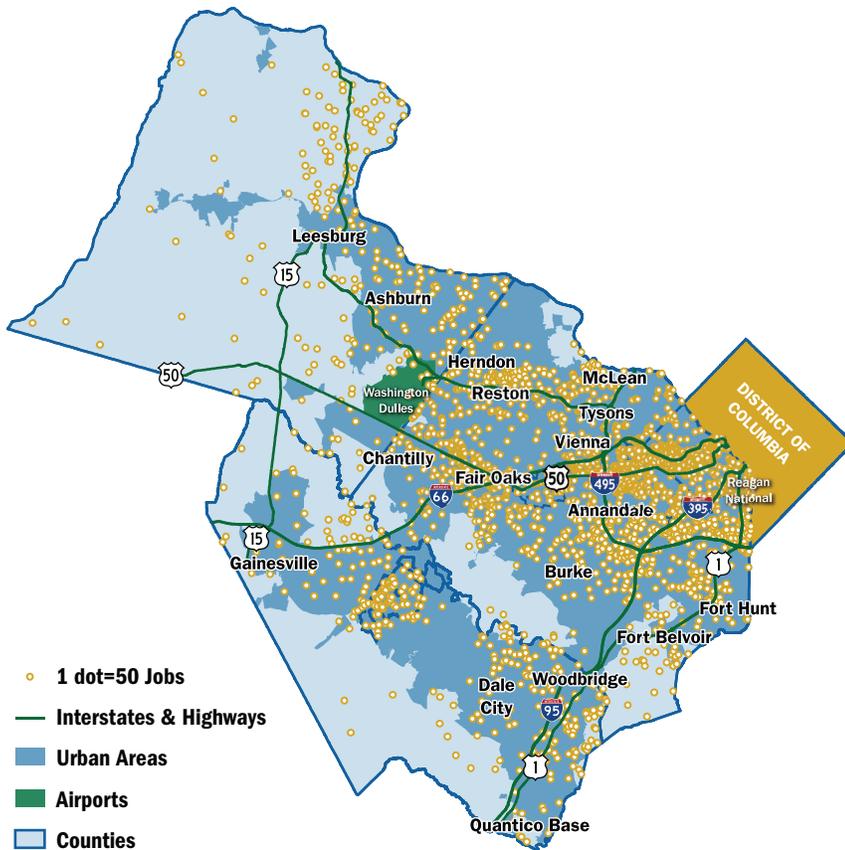
2020

HEALTHCARE WORKFORCE

As the largest institution of public higher education in Virginia, Northern Virginia Community College (NOVA) acts as a catalyst for economic growth in the capital region by providing access to highly skilled, credentialed, and diverse talent.

NOVA's Office of Strategic Partnerships and Workforce Innovation advances this mission by collaborating with employers, economic development organizations, education institutions, community-based organizations, and local governments in the northern Virginia region to address the skills gap and develop a robust talent pipeline.

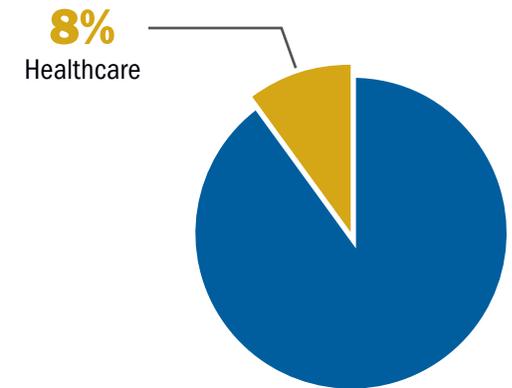
Concentration of Healthcare Jobs by ZIP code tabulation area (ZCTA) in northern Virginia



Source: Chmura Economics & Analytics, JobsEQ.

NOTE: Individual dots do not represent exact locations of jobs/establishments, but are evenly distributed geographically across each ZCTA to represent the concentration of jobs in each area.

NOVA Regional Workforce



110,438

Total healthcare jobs in the NOVA region as of Q1 2020



\$70,000

Average annual wage of healthcare workers in the NOVA region



38,069

Healthcare job postings in the NOVA Region in 2019



9th nationally

The Washington D.C. metropolitan area's ranking for total healthcare employment



13,700

Total healthcare degrees & credentials awarded in the Washington D.C. metropolitan area in 2017-2018

Overview

Our country's population is getting older. The aging of the baby boomer generation (individuals born between 1946 and 1964) combined with rising life expectancy have led to a significant increase in population over the age of 65. By 2030, it is expected that 1 in every 5 residents will be retirement age.¹ As the country's population continues to age, demand for healthcare services, as well as the skilled workforce necessary to deliver those services, will only continue to increase.

With this in mind, and with an eye towards better understanding NOVA's role in collaborating with employers and community partners to develop a skilled workforce, this brief examines regional labor market trends and indicators for healthcare occupations in order to determine where our region is now, and what the near future may look like.

PLEASE NOTE: While the COVID-19 crisis has upended the economy and will no doubt affect trends in the healthcare workforce well into the future, at the time of this report's update (July 2020) its long-term labor market impacts are not yet fully clear. This is partly due to a necessary lag in data collection for many of the federal sources we utilize, but also because the shape of the crisis continues to evolve rapidly. As a result, we have chosen to keep this report's focus on the long-term trends in play before COVID; all data from Q1 2020 is preliminary, while job posting data is provided for the full 2019 calendar year. For regular updates on the labor market impacts of COVID-19, please visit the "Additional Research" section of our website at www.nvcc.edu/lmi.

Definitions

Washington D.C. Metropolitan Area (D.C. MSA) – The 24 counties (and independent cities) centered around the District of Columbia that are highly integrated economically and socially, as defined by the United States Office of Management and Budget. For the purpose of analysis, we consider four different sub-regions within the MSA:

NOVA Region – The nine jurisdictions served by Northern Virginia Community College, including: Arlington County, Alexandria City, Fairfax County, Fairfax City, Falls Church City, Loudoun County, Manassas City, Manassas Park City, and Prince William County.

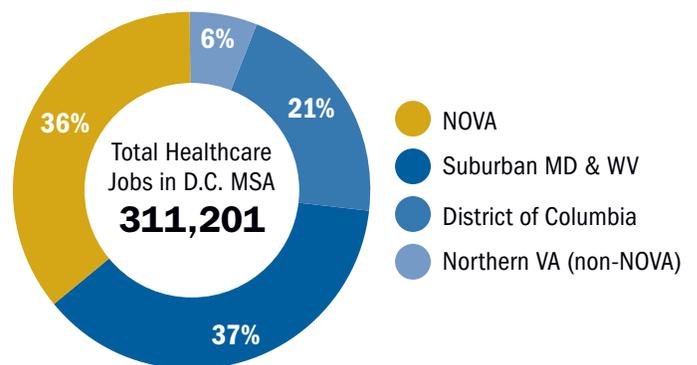
Suburban Maryland (MD) and West Virginia (WV) – The counties in Maryland and West Virginia that lie within the Washington D.C. MSA, including: Calvert County, Charles County, Frederick County, Jefferson County (WV), Montgomery County, and Prince George's County.

District of Columbia – The city and federal district that lies at the core of the metropolitan area.

Northern Virginia (Non-NOVA) – The outlying Virginia counties that compose the remainder of the Washington

D.C. MSA, but are not included in the NOVA Region. Includes: Clarke County, Culpeper County, Fauquier County, Fredericksburg, Rappahannock County, Spotsylvania County, Stafford County, & Warren County.

Figure 1. Healthcare Workforce by D.C. MSA Sub-Region



Source: Chmura Economics & Analytics, JobsEQ.

Healthcare – While the healthcare industry employs individuals in a wide range of roles, we examine the segment of the workforce with roles and responsibilities that directly involve the provision and administration of healthcare services through research, diagnosis,

¹ "2030 marks important demographic milestones for U.S. population." United States Census Bureau, 6 September 2018. <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html>

treatment, and care. This also includes occupations involved in animal health (such as veterinarians and veterinary technicians), and mental health (e.g. psychiatrists, counselors, and therapists).

The following table (Table 1) contains a selected list of the occupations we have considered in this analysis, including the codes and titles used by the Bureau of

Labor Statistics' standard occupation classification (SOC) system to formally define occupational categories for data collection and analysis, as well as total employment for the occupation in the NOVA region as of Quarter 1 of 2020. While our overall analysis included 90 occupations, for the sake of brevity we have only provided the titles of occupations with employment of over 500 (or, those in roughly the upper 50% of the group).

Table 1. Healthcare Occupations in the NOVA Region (over 500)

SOC Code	SOC Title	Total Employment	SOC Code	SOC Title	Total Employment
11-9111	Medical & Health Services Managers	2,518	29-2012	Medical & Clinical Laboratory Technicians	1,175
19-1042	Medical Scientists, Except Epidemiologists	817	29-2034	Radiologic Technologists & Technicians	1,414
19-5011	Occupational Health & Safety Specialists	983	29-2042	Emergency Medical Technicians	528
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	2,523	29-2052	Pharmacy Technicians	2,479
21-1022	Healthcare Social Workers	912	29-2055	Surgical Technologists	511
25-1071	Health Specialties Teachers, Postsecondary	699	29-2056	Veterinary Technologists & Technicians	858
29-1021	Dentists, General	1,411	29-2061	Licensed Practical & Licensed Vocational Nurses	5,185
29-1031	Dietitians and Nutritionists	517	29-2081	Opticians, Dispensing	611
29-1051	Pharmacists	1,843	29-2098	Medical Records Specialists, & Health Technologists/Technicians	2,392
29-1071	Physician Assistants	754	29-9098	Health Information Technologists, Medical Registrars, Surgical Assistants, & Healthcare Technical Workers	503
29-1122	Occupational Therapists	821	31-1121	Home Health Aides	4,334
29-1123	Physical Therapists	1,651	31-1122	Personal Care Aides	13,406
29-1126	Respiratory Therapists	536	31-1131	Nursing Assistants	8,307
29-1127	Speech-Language Pathologists	1,045	31-2021	Physical Therapist Assistants	633
29-1131	Veterinarians	875	31-9011	Massage Therapists	1,490
29-1141	Registered Nurses	16,451	31-9091	Dental Assistants	3,253
29-1171	Nurse Practitioners	1,345	31-9092	Medical Assistants	4,403
29-1215	Family Medicine Physicians	1,008	31-9094	Medical Transcriptionists	516
29-1228	Physicians and Ophthalmologists, All Other (Except Pediatric)	3,304	31-9096	Veterinary Assistants & Laboratory Animal Caretakers	1,157
29-1292	Dental Hygienists	2,229	31-9097	Phlebotomists	984
29-2011	Medical & Clinical Laboratory Technologists	1,210	43-6013	Medical Secretaries & Administrative Assistants	2,958

Employment in All Other Healthcare Occupations Not Listed Above (48 total): 9,888

Source: Chmura Economics & Analytics, JobsEQ; O*NET OnLine.

Occupations

Table 2. Summary - Healthcare Occupation Employment in the NOVA Region

	Current (Q1 2020)			Last 5 Years	Next 3 Years			Average Annual Growth
	Total Employment	Average Annual Wage	Location Quotient (LQ)	Average Annual Growth	Total New Demand	Projected Separations*	New Growth	
NOVA Region	110,438	\$70,000	0.7	3.5%	35,651	30,275	5,376	1.6%
D.C. MSA	311,201	\$72,100	0.8	2.5%	96,745	83,758	12,987	1.4%

Source: Chmura Economics & Analytics, JobsEQ.

*Includes projected demand due to individuals exiting the workforce (due to retirements, etc.) or changing careers/occupations (i.e. transfers).

As of Q1 2020, there were over 110,000 healthcare jobs in the NOVA region, representing over a third (36%) of healthcare jobs in the entire Washington D.C. metropolitan area (Figure 1). Healthcare jobs in the NOVA region have been growing faster on average over the last 5 years than across the MSA and are projected to continue slightly outpacing the region as a whole, with 5,300 new jobs expected over the next 3 years (Table 2).

Personal care and home health aides are expected to see significant growth over the next three years, adding nearly 1,600 new jobs and accounting for, together, nearly a third of new growth in healthcare (Figure 2). While registered nurses and other direct care occupations such as nursing and medical assistants are growing at a slower rate than home health and personal care aides on an annual basis, their larger overall employment means their growth will still make up a significant segment of new jobs in the near term. These local trends follow those at the national level, where personal care aides, registered nurses, and home health aides are expected to see the first, third, and fourth highest totals of job growth, respectively, among all occupations by 2028.²

In addition to projected growth, another measure of an occupation's importance and potential demand in the region is its concentration in the regional economy compared to its concentration nationally, also known as an occupation's **Location Quotient (LQ)**.

An LQ of 0.8 – 1.2 usually means the occupation makes up a similar proportion of total regional employment as

it does nationally, while an LQ higher than 1.2 means that the occupation makes up a greater share of the regional labor market than it does at a national level (and vice-versa for an LQ below 0.8).

Overall, the healthcare workforce is less concentrated in the NOVA region than it is nationally, with an LQ of 0.7 across all healthcare occupations. Even so, a few occupations (employing over 500 individuals) are more concentrated locally including: dentists and dental hygienists; veterinary professions; and occupational health and safety specialists (Table 3).

Table 3. Highest Concentrated Healthcare Occupations in the NOVA Region

Occupation	LQ*	Total Employment
Veterinary Assistants & Laboratory Animal Caretakers	1.4	1,157
Dentists, General	1.2	1,411
Veterinarians	1.2	875
Occupational Health & Safety Specialists	1.2	983
Dental Hygienists	1.2	2,229

Source: Chmura Economics & Analytics, JobsEQ.

Four out of five of these highly concentrated occupations (excluding veterinary assistants) offer average annual wages of over \$80,000. This would suggest that the NOVA region tends to employ a greater share of high-skill (thus, higher wage) healthcare professionals

² "Occupations with the most job growth, 2018 and projected 2028." Employment Projections Program, Bureau of Labor Statistics.

<https://www.bls.gov/emp/tables/occupations-most-job-growth.htm>

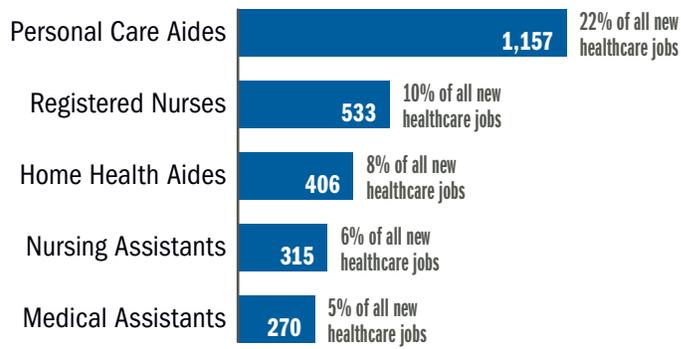
than the country as a whole. Indeed, high average incomes and wealth in the region—Loudoun County has the highest median household income in the country—allow greater access to the sorts of specialized and preventative services provided by high-wage, high-skill healthcare professionals.

In fact, wages for these high-skill positions can be two to three-and-a-half times as high as the average annual wage across all occupations in the region (\$67,800). Surgeons have the highest average annual wage among healthcare occupations in the NOVA region (\$257,400), however only around 250 of these jobs exist locally. Considering just those occupations employing more than 500 people, doctors still make up the bulk of occupations with the highest wages (earning between \$185,000 and \$200,000 per year, on average); veterinarians as well as medical and health services managers also earn over \$100,000 annually (Table 4).

The lowest average annual wages in the region tend to be for low- and middle-skill support occupations such as personal care and home health aides, veterinary assistants, and nursing assistants. The fact that the occupations expected to see the fastest growth over the next three years are also those with the lowest wages is significant, particularly considering the cost of living in the region—for reference, average annual wages for all of these occupations except Pharmacy Technicians below

the roughly \$35,000 per year calculated as a living wage for a single adult in the Washington D.C. MSA by MIT’s Living Wage Calculator.³

Figure 2. Healthcare Occupations Expected to Add the Most New Jobs over the Next 3 Years



Source: Chmura Economics & Analytics, JobsEQ.

As the population continues to age, and demand for personal and home health care services continues to grow, it will be important to continue offering the training and credentials necessary to provide low-skill workers with entry into these positions. However, it will be even more critical to develop further education and training pathways that will allow these individuals to then advance into higher-skilled, better-paying jobs.

Table 4. Healthcare Occupations (employing over 500) with the Highest and Lowest Annual Wages in the NOVA Region

Highest		Lowest	
Occupation	Average Annual Wages	Occupation	Average Annual Wages
Family Medicine Physicians	\$201,100	Personal Care Aides	\$28,300
Dentists, General	\$196,500	Home Health Aides	\$28,400
Physicians and Ophthalmologists, All Other (Except Pediatric)	\$185,100	Veterinary Assistants & Laboratory Animal Caretakers	\$29,700
Veterinarians	\$135,900	Nursing Assistants	\$32,500
Medical & Health Services Managers	\$131,400	Pharmacy Technicians	\$39,300

Source: Chmura Economics & Analytics, JobsEQ.

³ “Living wage calculation for Washington-Arlington-Alexandria, DC.” Massachusetts Institute of Technology, 2020. <http://livingwage.mit.edu/metros/47900>

Industries

Table 5. Industry Sectors Employing Over 2% of all Healthcare Jobs

Sector Title	Healthcare Employment	% of Healthcare Jobs Employed in Sector	Annual % Growth (Healthcare Jobs)	Annual % Growth (All Sector Jobs)
Health Care and Social Assistance	81,422	73.7%	1.8%	1.7%
Public Administration	9,305	8.4%	-0.1%	0.0%
Professional, Scientific, & Technical Services	5,771	5.2%	1.5%	1.4%
Educational Services	3,847	3.5%	1.2%	0.6%
Retail Trade	3,322	3.0%	0.3%	-0.1%
Other Services	2,462	2.2%	0.7%	0.2%
Total - Top 6 Sectors	98,145	96.1%	1.5%	0.8%
All Other Sectors	3,677	3.9%	0.8%	0.7%

Source: Chmura analysis of data from BLS's Quarterly Census of Employment and Wages (QCEW).

It is easily assumed that the vast majority of healthcare jobs—that is, those primarily requiring healthcare-specific skills and knowledge—are located in the “healthcare and social assistance” industry sector. Still, any number of other businesses also employ healthcare professionals, including department stores with on-site pharmacies, public schools with “school nurses,” and even some private companies. While nearly three-quarters of regional healthcare employment lies within the healthcare sector, just over 8% of the workforce is employed in public administration (including government-administered assistance programs and courts) and thousands more are also

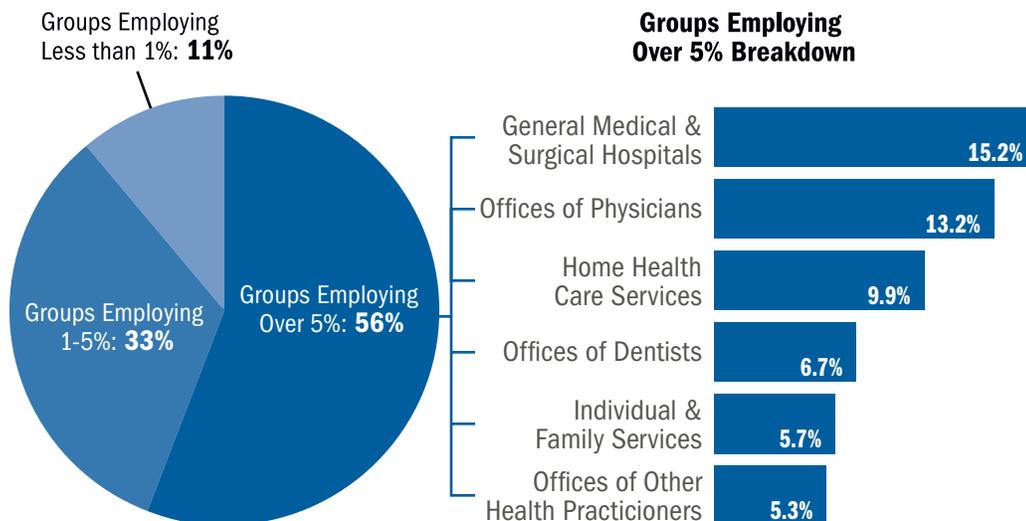
employed in professional services, retail, education, and other service sectors (Table 5). In total, these six sectors also employ nearly all healthcare professionals in the region (96.1%).

Within industry sectors, industry groups are smaller, more specific categories of businesses with similar functions—looking at industry groups provides a better understanding of the specific types of employment healthcare workers are involved in regionally, as well as how diverse the workforce is in terms of industry function. As opposed to the information technology workforce, where the majority of workers are employed

within a single industry group, healthcare occupations in the NOVA region are largely concentrated within groups that each employ at least 5% of the healthcare workforce (or more than 5,000 workers); many fewer groups employ less than 1,000 (or 1%) of healthcare workers (Figure 3).

General medical and surgical hospitals employ the largest share of healthcare workers regionally (around 15,000).

Figure 3. Industry Groups Employing Healthcare Workers in the NOVA Region (by % of All Healthcare Employment)



Source: Chmura analysis of data from BLS's Quarterly Census of Employment and Wages (QCEW).

However, the expected growth rates for healthcare occupations in lower wage industry groups such as home health care and individual services are significantly higher (over 3% annually, on average), meaning these industry groups will employ larger and larger shares of the healthcare workforce over time. “Other health practitioner” offices follow closely behind with a projected growth rate of 2.4% (Table 6).

Businesses in this industry group include “alternative” health practitioners such as acupuncturists and naturopaths, as well as other specialty healthcare practices including optometrists, podiatrists, and mental health practitioners. A slightly higher share of healthcare workers is also employed in these offices of than nationally (5.3% in the NOVA region compared to 4.4%).

So, although the region can anticipate significant continued growth in lower-wage services such as home health and personal care/individual services, the regional healthcare workforce also “specializes”—and is growing—in high-wage, high-cost specialty and preventative services. This further reinforces the observation that, while the regional healthcare workforce reflects national trends in the rapid growth of home health and personal care, it is more heavily oriented towards specialty health areas than the nation on average.

These “other practitioner” establishments may be too small, and thus do too little hiring, to show up among employers with a high volume of job postings for healthcare occupations in the region, however. The list of those employers is heavily weighted towards the large hospitals and medical systems that employ the greatest share of healthcare professionals regionally, including Inova, Anthem Blue Cross, and HCA (Table 7). While job postings are a useful proxy or supplement for understanding labor demand, it is important to note that they do not provide a perfect measure; as is evident, they tend to favor employers with large workforces and the resources to conduct significant online hiring.

Table 6. Top Industry Groups Employing Healthcare Workers in the NOVA Region

Industry Group	% of Industry Employed in Healthcare Occupations	Average Annual Wage (Healthcare Occupations)	Projected Annual Growth (Healthcare Occupations)
General Medical & Surgical Hospitals	76.1%	\$75,600	0.4%
Offices of Physicians	70.7%	\$96,900	1.4%
Home Health Care Services	90.8%	\$43,600	3.7%
Offices of Dentists	75.3%	\$90,400	1.0%
Individual & Family Services	54.2%	\$35,700	3.3%
Offices of Other Health Practitioners	66.6%	\$71,400	2.4%

Source: Chmura analysis of data from BLS’s Quarterly Census of Employment and Wages (QCEW).

However, this list of top hiring healthcare employers does also reflect the diversity of industry areas employing the regional workforce. It also reflects the prominence of employers involved in home health and personal care services (such as those provided for seniors): Sunrise Senior Living ranks fifth for job postings, while HCR ManorCare—a provider of skilled nursing and home health care—and Erickson Living—a retirement community operator—rank just outside the top ten (numbers 17 and 18, with 191 and 190 job postings respectively).

Table 7. Top Ten NOVA Healthcare Employers by Total Job Postings (2019)

Employer	Job Postings
Inova Health System	4,708
Anthem Blue Cross	1,932
Hospital Corporation of America	834
Aveanna Healthcare	769
Sunrise Senior Living, Inc.	610
Novant Health	439
Virginia Hospital Center	392
Spectrum Health	364
Sentara Healthcare	354
Quest Diagnostics Incorporated	328

Source: Burning Glass Technologies: Labor Insight. 2020.

Regional Comparison

In order to best understand the local healthcare labor market, it is also useful to place the region in context of other similar metropolitan areas, peer cities, and nearby regions. In this case, we compare the NOVA region to the Washington D.C. metropolitan area (MSA), other national MSAs with prominent healthcare industries, as well as two nearby MSAs, Baltimore and Richmond.

The D.C. MSA ranks ninth among United States metropolitan areas for the total size of its healthcare workforce, but places lower in terms of the overall concentration of healthcare occupations among the entire workforce (Table 8). The NOVA region, despite having a population nearly the size of the Baltimore metropolitan area (2.5 million and 2.8 million respectively), ranks well below the MSA in the size of its healthcare workforce—the equivalent of 36th—and even has a lower concentration of healthcare jobs than the larger D.C. MSA; both areas fall below the average concentration of healthcare jobs across all metropolitan areas (11.6%).

The comparatively small healthcare workforce in the region may be due, in part, to the fact that the regional population skews significantly younger than the country as a whole, both in terms of median age and the percentage of population aged 65 and above (Figure 4). As younger populations typically demand and utilize fewer medical services, a region with a younger population would experience a lower need for healthcare workers than other areas.

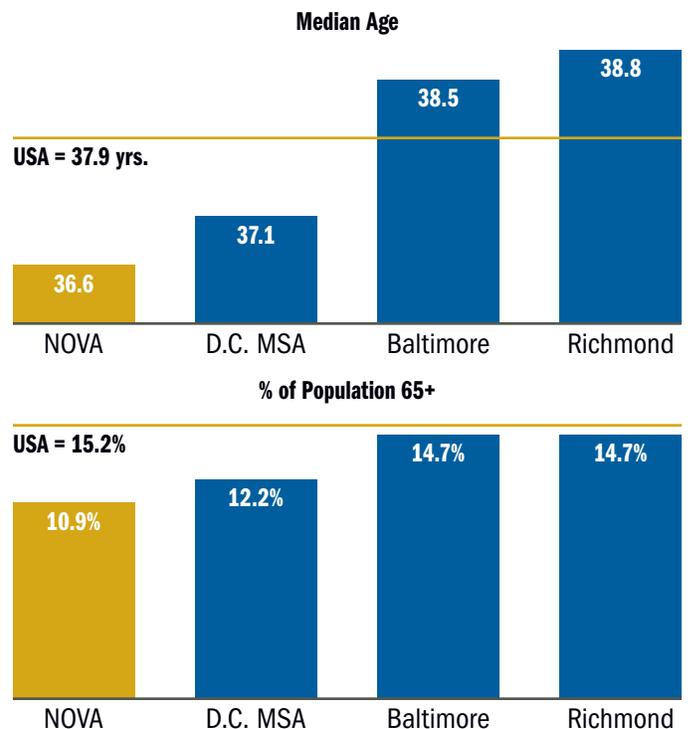
By contrast, the concentration of healthcare occupations is higher within the Baltimore and Richmond MSAs, right around or above the average of 11% across MSAs as a whole; the ages of their populations are also more in line with the national average. While the percentage of individuals 65 and older in each is right around, if not slightly lower, than the United States, their median ages are actually higher.

Table 8. Top MSAs by Total Healthcare Employment (in thousands) Compared to the NOVA Region and Nearby MSAs

MSA Rank	Region/MSA	Healthcare Employment	Total Employment	Healthcare Concentration
1	New York City	1,284.7	9,972.2	12.9%
2	Los Angeles	819.1	6,675.6	12.3%
3	Chicago	507.9	4,855.9	10.5%
4	Philadelphia	439.4	3,008.7	14.6%
5	Boston	385.2	2,875.5	13.4%
6	Dallas-Fort Worth	370.0	3,919.7	9.4%
7	Houston	328.4	3,310.3	9.9%
8	Miami-Ft. Lauderdale	320.4	2,959.2	10.8%
9	Washington D.C.	311.2	3,415.3	9.1%
10	San Francisco	283.3	2,628.7	10.8%
17	Baltimore	182.9	1,431.5	12.8%
-	NOVA Region	110.4	1,359.4	8.1%
43	Richmond	78.1	682.2	11.4%

Source: Chmura Economics & Analytics, JobsEQ

Figure 4. Population Age Comparisons Across Regions



Source: Census Bureau, American Community Survey 5-Year Estimates (2014-2018)

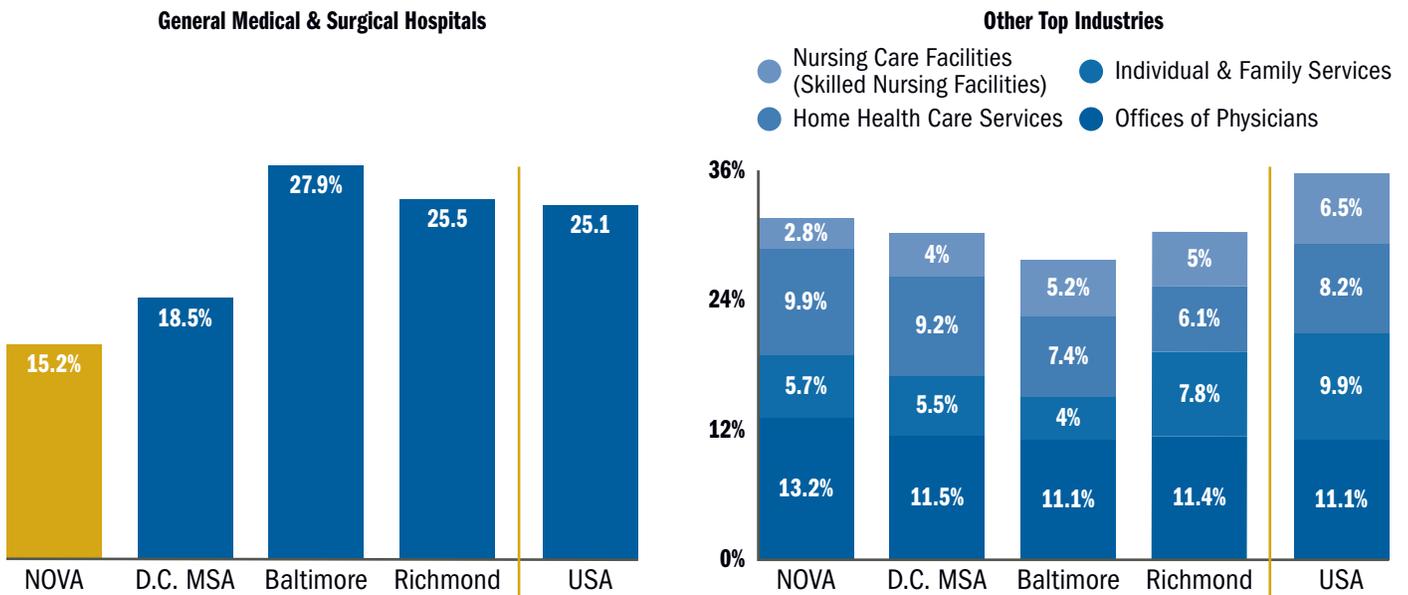
Figure 5 indicates the extent to which healthcare occupations are concentrated across various industry groups for the NOVA region, D.C. MSA, and nearby MSAs of Baltimore and Richmond—the concentration of healthcare occupations by group at the national level is also provided for reference. General medical and surgical hospitals employ the largest share of healthcare workers, regardless of area, while the other industry groups displayed are those four that employ the next largest shares at the national level.

Regardless of the fact that hospitals employ the highest percentage healthcare workers of any industry group, no matter the location (at least among those regions considered here), this share is noticeably lower in the NOVA region and D.C. MSA as a whole than in the other two nearby MSAs. Again, this may be due to differing population demographics and, thus, differing

healthcare needs among the populations in each area: if hospitals are primarily involved in urgent and intensive care, and these services are more likely among older populations, there will be a greater supply of hospitals to meet this demand.

Slightly larger percentages of the healthcare workforce in the NOVA region are employed in physician offices and home health care. This is in keeping with the findings of the previous section, which indicate that the healthcare industry and workforce in this area are more geared towards preventative and specialized care, with a growing demand for home health and personal care services. Even within relatively close regional proximity, the nature and activities of the healthcare workforce—and thus, skill and talent needs—may differ meaningfully.

Figure 5. Concentration of Healthcare Workers by Industry Group for NOVA, D.C. MSA, and Other Nearby Regions



Source: Chmura analysis of data from BLS's Quarterly Census of Employment and Wages (QCEW).

Education

In general, the NOVA region has much higher levels of education than the country as a whole, with 70% of the high-school graduate population (aged 25-64) holding some sort of 2-year, 4-year, or post-graduate degree compared to 47% nationally. Degree holders are also slightly more concentrated in the NOVA region than across the entire D.C. MSA, where roughly 63% of the same population holds an associate's degree or higher (Figure 6).

By contrast, the minimum education requirements for healthcare jobs in the region (as indicated in on-line job postings) are relatively evenly distributed, with opportunities available at all levels of education. In fact, a slight majority of job postings required less than a bachelor's degree (51.5%). Even given the larger concentration of high-skill

healthcare occupations in the region, around 1 in 5 healthcare jobs may only require a high school diploma, vocational training, or post-secondary credential (Figure 7).

Figure 6. Educational Attainment of Population Aged 25-64, High School Degree & Above

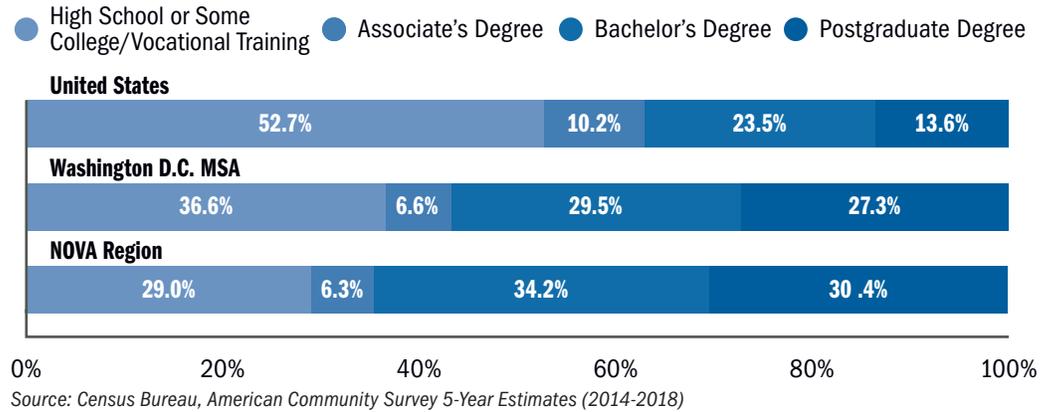


Figure 7. Minimum Education Requirements Requested in NOVA Healthcare Job Postings

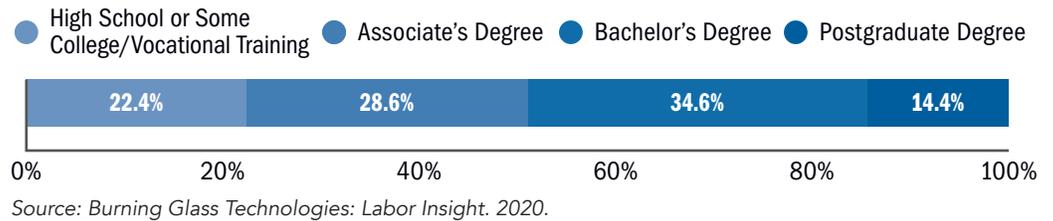


Table 9. Top 10 Healthcare Occupations Typically Requiring Less Than a Bachelor's Degree, More Than a High School Diploma (by total employment)

SOC Title	Total Employment	Typical Education (via BLS EP)	Average Annual Wage	Job Postings
Nursing Assistants	8,307	Postsecondary non-degree award	\$32,500	944
Licensed Practical & Licensed Vocational Nurses	5,185	Postsecondary non-degree award	\$54,900	1,404
Medical Assistants	4,403	Postsecondary non-degree award	\$41,400	880
Dental Assistants	3,253	Postsecondary non-degree award	\$48,300	317
Medical Records & Health Information Technicians	2,392	Associate's degree	\$51,700	1,226
Dental Hygienists	2,229	Associate's degree	\$91,600	135
Massage Therapists	1,490	Postsecondary non-degree award	\$45,400	292
Radiologic Technologists	1,414	Associate's degree	\$75,000	439
Phlebotomists	984	Postsecondary non-degree award	\$42,200	316
Veterinary Technologists & Technicians	858	Associate's degree	\$47,600	139

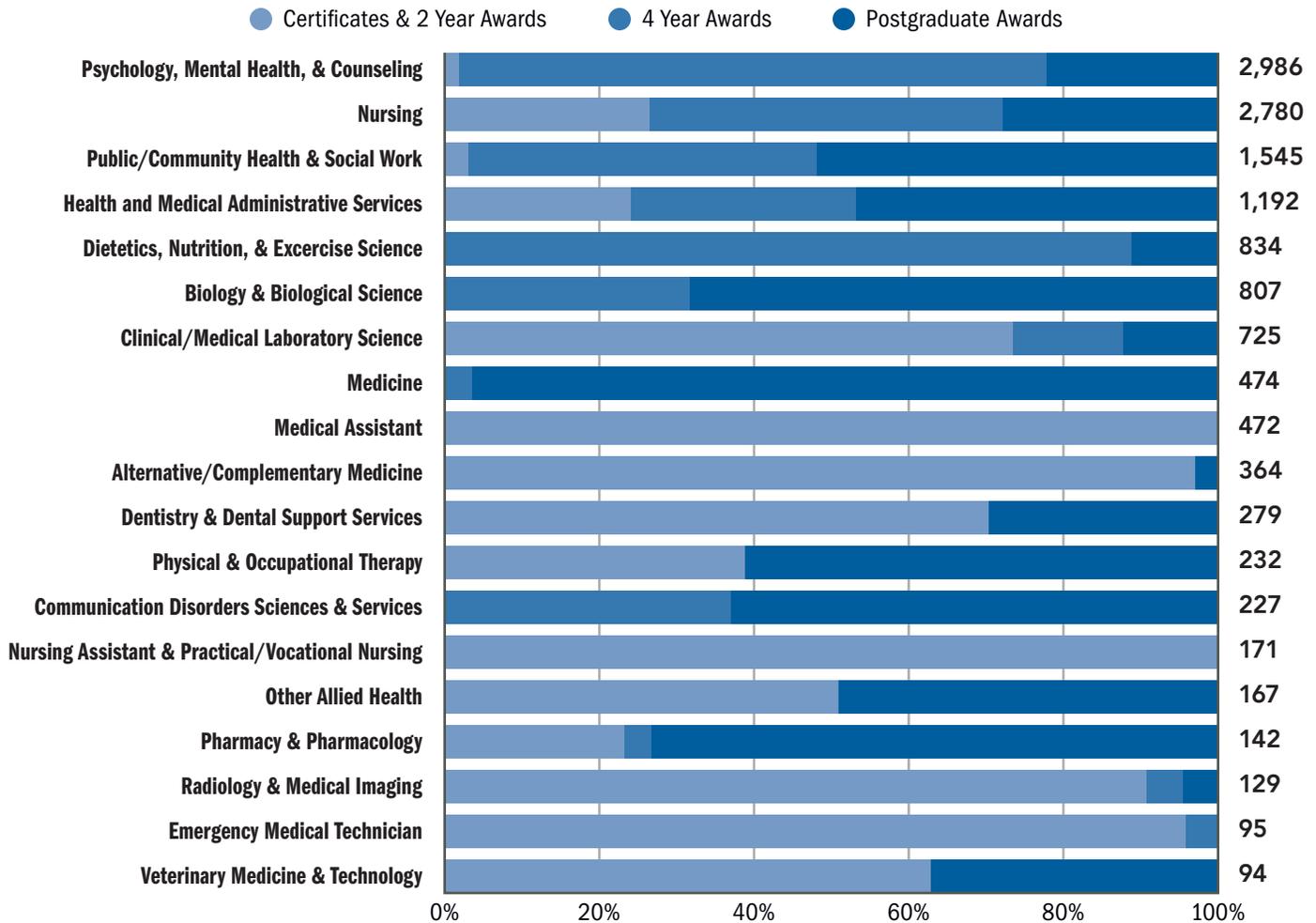
Source: Bureau of Labor Statistics, Employment Projections program (EP); Chmura Economics & Analytics, JobsEQ; Burning Glass Technologies: Labor Insight. 2020.

Among those occupations that typically require less than a bachelor's degree, but more than just a high school diploma, are many that may see meaningful growth in the region over the next three years (Table 9). Recall that nursing assistants and medical assistants, combined, are expected to add nearly 600 new jobs in that period of time. Practical/vocational nurses, dental assistants/hygienists, and massage therapists are all expected to add between 100 and 200 new jobs apiece. As a result, there is significant opportunity for lower-skilled individuals to advance with some additional training in healthcare.

As to the outcomes of that training, in the 2017-2018 academic year 472 certificates or two-year credentials were awarded in medical assisting and 171 were awarded

for nursing assistants or licensed practical nurses (LPNs) across the Washington D.C. MSA (Figure 8). Comparatively, this indicates that there may be room for additional postsecondary capacity in order to address future labor market demand for nursing assistants and LPNs. Despite a lower number of total completers, demand (measured in terms of job postings, as well as projected job growth plus separation demand) for both nursing assistants and LPNs generally exceeds demand for medical assistants. Career prospects are particularly strong for LPNs, which have relatively high average wages (compared to other sub-baccalaureate occupations) as well as the potential for advancement, through additional training/education, into even higher paid registered nursing jobs.

Figure 8. Healthcare Credentials Awarded by Program Area and Level (D.C. MSA, 2017-2018)



Source: National Center for Education Statistics, IPEDS.

Skills and Certifications

In order to develop education and training opportunities that truly meet the demand among healthcare employers for well-qualified talent, however, it is critical to understand which skills they are looking for within the workforce.

Table 10 indicates the most in-demand skills for all healthcare occupations in the NOVA region based on the number of postings requesting the skills. These are also designated as either baseline (or “soft”) skills—those that are necessary regardless of job function—or as specialized skills—those that are uniquely necessary to a particular job or set of job functions.

A mix of baseline and specialized skills are requested most frequently for healthcare positions. Those specialized skills that are requested frequently are general healthcare skills that cut across many different occupations (such as patient care and CPR). Computer literacy ranks highly, an indication of the increasing digitalization and integration of technology into all aspects of the healthcare sector.

The most in-demand certifications across all healthcare job postings (Table 11) largely reflect the need for credentialed validation of basic, yet universal, specialized skills within healthcare (CPR, BLS, and ACLS). Otherwise, the certifications most often requested are those formal credentials and licenses necessary to practice as in-demand, middle-skill healthcare occupations (e.g. RN, LPN, and CNA).

Table 10. Top Skills Listed on NOVA Healthcare Job Postings

Skill	Type	% of Job Postings
Communication Skills	Baseline	30.8%
Patient Care	Specialized	23.7%
Teamwork / Collaboration	Baseline	22.4%
Problem Solving	Baseline	16.3%
Treatment Planning	Specialized	14.1%
Computer Literacy	Baseline	13.7%
Cardiopulmonary Resuscitation (CPR)	Specialized	13.5%
Scheduling	Specialized	13.0%
Written Communication	Baseline	11.5%
Customer Service	Specialized	11.0%

Source: Burning Glass Technologies: Labor Insight. 2020.

Table 11. Top Certifications Listed on NOVA Healthcare Job Postings

Certification	% of Postings
Registered Nurse	39.5%
Basic Life Saving (BLS)	16.4%
Advanced Cardiac Life Support (ACLS) Certification	10.5%
First Aid CPR AED	10.3%
Driver's License	8.3%
Licensed Practical Nurse (LPN)	6.7%
Basic Cardiac Life Support Certification	5.5%
Security Clearance	4.2%
American Registry of Radiologic Technologists (ARRT) Certification	3.1%
Certified Nursing Assistant	2.6%

Source: Burning Glass Technologies: Labor Insight. 2020.

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