Defining the Care Workforce A New Way to Think about Employment in Healthcare, Education, and Social Services

Leigh Wedenoja

November 2022





Defining the Care Workforce

A New Way to Think about Employment in Healthcare, Education, and Social Services

Introduction

Although the COVID-19 pandemic exacerbated problems in the care workforce, those problems existed long before the pandemic hit and have persisted following the removal of most pandemic restrictions and the increased availability of vaccines. Prior to the pandemic there were shortages of childcare workers,¹ home health aides,² nurses,³ and teachers.⁴ The shortage of childcare workers, in particular, has continued to get worse even after the acute period of the pandemic has passed with many workers either leaving the workforce completely or taking higher paid jobs in retail or food service.⁵

The COVID-19 pandemic then threw the United States' care workforce even further into crisis by disrupting healthcare, childcare, education, and other care-related services. Hospitals in particularly hard hit areas rapidly shifted from providing

elective and outpatient procedures to treating COVID-19 patients.⁶ Patients canceled and policies prohibited elective procedures and dental appointments as concerns of infection began to rise and stay-at-home orders closed many schools and childcare centers.⁷ Care workers at high risk or with high-risk household members exited the workforce, families canceled the services of home health aides in order to reduce the probability of infection for vulnerable relatives,⁸ and parents—disproportionately women—left the workforce to care for children at home.

A stable, well-trained care workforce is not only crucial to the well-being of communities, but the functioning of the rest Care workers are responsible for maintaining the education, health, and general welfare of the population. of the economy. Care workers are responsible for maintaining the education, health, and general welfare of the population. In recent years, journalists have told the stories of these workers and families affected by the shortage. State and federal leaders have called for policies and investments that will bolster these sectors. One of the hurdles to effectively addressing the challenges in these sectors is that the care workforce is amorphously defined and understudied. The goal of this report is to characterize the occupations that make up the US care workforce and the people who work in those occupations.

The report will proceed as follows—first we discuss the definition of the care economy and care workforce, then the occupations that make up that workforce with their required education and standard wages, then we discuss the people (mostly women) who make up the care workforce with a special focus on the lowest paid occupations—childcare workers and home health aides. The report concludes by discussing how New York's care workforce differs from the nation as a whole. While generally very similar, care workers in New York are more likely to be immigrants and have, on average, higher wages.

What Is the Care Economy and Care Work?

The "care economy," "care work," and "care workforce" are all terms with a myriad of different and often overlapping definitions. From a simple economic perspective, the care economy is the production of "care" rather than traditional goods and services. Economist Nancy Folbre describes it as "the sight of production, development and maintenance of human capabilities—a process very different from producing commodities that can easily be bought and sold."⁹ In other words, the care economy produces intangible capabilities, including education, health, and well-being. This does not mean that care work is not commodified, bought, and sold. Americans pay for health insurance and health procedures, hire childcare workers to keep their children safe, and pay for schools and teachers to educate their children. Care work also has a component of "home production" as families provide health, education, and other care services within the home that are not captured in traditional economic statistics.

The care economy is a large and critical part of the US economy. Education and health are both extremely valuable industries. The US invested \$795 billion in K-12 schools for the 2019-20 school year in combined federal, state, and local money with 93 percent of the funds originating from local sources.¹⁰ The US spends on average \$13,187 per pupil per year.¹¹ Healthcare spending accounted for 17 percent of US GDP in 2017 and over \$11,000 per person, a sizable increase since the 1980s when it was around 10 percent.¹² In 2020, healthcare spending hit a record \$4.1 trillion due, in part, to the pandemic.¹³

The care economy straddles both the public and private sectors. Federal, state, and local governments employ care workers directly through funding public hospitals, public schools, and a number of social service programs. They also indirectly fund privately employed care workers through Medicare, Medicaid, a number of social service programs, and subsidies for childcare and other education services. In 2020,

the federal and state governments spent \$829.5 billion on Medicare and \$671.2 billion on Medicaid.¹⁴

A significant part of the care workforce are highly trained professionals with specific skills that would be difficult for family members to replicate in the home without significant training. This includes doctors, nurses, dentists, teachers, and social workers. However, other aspects of the care economy are paid alternatives to home production, including certain kinds of childcare workers and home health aides. Unpaid care work, generally provided by family members, still makes up the majority of the care workforce around the world¹⁵ and a significant component of care work in the US. Estimates of the economic value of unpaid care work around the world are as high as \$11 trillion¹⁶ and some estimates of the value of women's unpaid labor that rely on time use and local minimum wages are as high as \$10.9 trillion globally and \$1.5 trillion in the US.¹⁷ The pandemic has also increased the burden of unpaid care work when schools were closed and medical support workers were reassigned to COVID-related care. The effect was disproportionately felt by women.¹⁸

There are many ways to define which occupations are part of the care economy and care workforce depending on the methodology and theory. In an industry-wide approach, the care economy could be considered to include all production and all workers involved in the relevant industries whether or not those workers are directly involved in care provision. In this case, everyone in the healthcare industry, even accountants and administrators who never interface with patients would be considered part of the care economy. Under this approach, the care economy could be categorized by the Bureau of Labor Statistics's (BLS) Education and Health Services supersector.¹⁹

From another perspective, the care economy could be considered only in relation to home production of "care."²⁰ In this case, the care economy would only include occupations that function as substitutes for that home production, meaning health aides, early childhood education teachers, childcare workers, and various community support staff would be part of the care economy, but highly trained professionals with skills not traditionally found in the home—doctors, nurses, and secondary school teachers—would not. We do not believe these definitions fully capture the extent or importance of the care workforce.

Given the limitations of the above approaches, in this report, we have chosen to focus on the direct care workers that are the heart of the care economy and apply a definition similar to Dr. Fobre's. While there are many support personnel, industries, and technologies that contribute to the care economy and production of care, direct care workers are the crucial We define a care worker as someone who engages in direct services to support people's necessary functioning and human capabilities from birth to death—specifically, direct practitioners in healthcare, childcare, elder care, K-12 education, and other directly provided social services.



element. We define a care worker as someone who engages in direct services to support people's necessary functioning and human capabilities from birth to death—specifically, direct practitioners in healthcare, childcare, elder care, K-12 education, and other directly provided social services. These occupations cover a wide range of education, skill, and pay levels, including both highly educated professionals such as teachers and physicians, as well as occupations that require substantially less formal training, including home health aides and childcare workers. While unpaid care work remains an important component in the production of care, in this report, we will focus only on workers in the formal economy. All of these occupations rate "assisting and caring for others " as one of their most important work activities...

All of these occupations rate "assisting and caring for

others"²¹ as one of their most important work activities, and for the vast majority, it is the most important work activity for the occupation. However, not all occupations that require care for others were included as part of the care workforce. There are several service and protective service occupations that we did not include in our definition of the care workforce, including lifeguards, personal appearance workers, and police officers among others. The next section will cover in detail the occupations we have included in the care workforce.

These occupations largely cover three different industries—healthcare, education, and social services—which are traditionally discussed independently from each other by economists and in workforce literature. While the types of education and skills required in these industries vary widely they have similar patterns of employment and are all necessary to support individuals' basic functioning. All of these industries contain occupations that require significant education and occupations that require virtually no education, and all three are dominated by women.

THE CARE ECONOMY



Care workers are more likely to be women. These women are more likely to own their home, have children, and less likely to move than women in working in other occupations.

PROJECTED WORKFORCE NEEDS

The number of people employed in the care economy is projected to grow by 10.5 percent over the next 10 years. This is nearly twice the projected growth across all occupations (5.3 percent). The aging population and greater prevalence of chronic conditions is driving these trends.

ADDITIONAL WORKERS NEEDED OVER NEXT TEN YEARS

815,700 HOME HEALTH AND PERSONAL CARE AIDES

185,200 REGISTERED NURSES 112,200 MEDICAL ASSISTANTS

THE CARE ECONOMY

BREAKING IT DOWN

24.1 MILLION CARE WORKERS

Care workers make up nearly one-fifth of all workers in the US and work across healthcare, education, and social services. **17%** of total U.S. workforce

HEALTHCA 62.2%	RE			EDUCATION 28.4%	social services 9.4%
	# of Occupations	# of Employees	Avg. Annual Wage	Projected Growth	% Jobs requiring Bachelors +
Healthcare Practitioner or Technicians	56	8,579,190	\$85,893	8.4%	65.9%
Healthcare Support	17	6,440,900	\$32,246	14.4%	0.0%
Education	17	6,358,340	\$53,251	6.3%	65.8%
Childcare	1	494,360	\$26,790	6.5%	0.0%
Community and Support Services	15	2,261,370	\$53,948	11.2%	79.7%

THE CARE WORKFORCE IN NEW YORK

Care workers in New York are 12 percent less likely to be white, 50 percent more likely to be Black, and 22 percent more likely to be Hispanic than care workers across the US.



of care workers are **people of color** compared to 32% nationally.



of care workers have immigrated to the US compared to 14% nationally.

HOW WE DEFINE A CARE WORKER

We define a care worker as someone who engages in direct services to support people's necessary functioning and human capabilities from birth to death—specifically, direct practitioners in healthcare, childcare, elder care, K-12 education, and other directly provided social services.

Care Workforce Occupations and Wages Nationally

Care workforce occupations fall into six major occupation categories as determined by the US Census Bureau and the Bureau of Labor Statistics:

- social scientists and related workers,
- community and social service occupations,
- education and library occupations,
- healthcare practitioners and technical occupations,
- healthcare support occupations, and
- personal care and service occupations.²²

We have limited the occupations within these categories to those that provide direct care as listed above. For example, we only include clinical and school psychologists (rather than research or industrial psychologists) from social scientists, and exclude postsecondary educators and most library occupations as they do not provide direct care based on our definition. We include all healthcare occupations, all pre-kindergarten through high school teachers and student-facing support staff, as well as childcare workers from the personal services category. The complete list of occupations is included in <u>Appendix A</u>.²³

In 2020, the US care workforce, including the self-employed, was about 24.1 million workers, which is about 17 percent of the total US workforce. The largest components of the care workforce are healthcare practitioners and technical support occupations (26 percent), healthcare support occupations (27 percent), and education and library occupations (26 percent). Home health and personal care aides are the largest single occupation at 13 percent of the care workforce and when combined with the similar and often grouped health support occupations of nursing assistants, orderlies, and psychiatric aides, they make up about 20 percent of the care workforce. In other word, 1 in 5 care workers are in these support jobs.

The care workforce can be categorized in a number of different ways. We are going to focus this analysis on two different characteristics of the jobs associated with the care workforce: level of education required and industry. We will then explore the demographics of the workers in these occupations. Care occupations are more likely to be filled by women and people of color (POC) than jobs in other sectors of the economy. Demographics of the workforce as a whole and specific occupations and industries will be discussed in the next section. In this section, we will discuss the typical and observed level of education in these jobs as well as their average wages. We have broken the occupations into three areas: healthcare, education and childcare, and community services and support. Each of these three major categories include occupations with a wide variance in the education and training that is required as well as the average wage.

TABLE 1A. Ten Most Common Healthcare Practitioners and Technical Occupations

		Mean Annual	
Title	Employees	Earnings	Degree
Registered Nurses	2,986,500	\$80,010	Bachelor's degree
Licensed Practical and Licensed Vocational Nurses	674,440	\$50,090	Postsecondary nondegree award
Pharmacy Technicians	415,310	\$36,450	High school diploma or equivalent
Physicians, All Other; and Ophthalmologists, Except Pediatric	375,390	\$218,850	Doctoral or professional degree
Clinical Laboratory Technologists and Technicians	326,220	\$55,990	Bachelor's degree
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	318,010	\$48,270	Postsecondary nondegree award
Phamarcists	315,470	\$125,460	Doctoral or professional degree
Emergency Medicial Technicians and Paramedics	257,700	\$40,370	Postsecondary nondegree award
Physical Therapists	220,870	\$91,680	Doctoral or professional degree
Nurse Practitioners	211,280	\$114,510	Master's degree

TABLE 1B. Ten Most Common Healthcare Support Occupations

		Mean Annual	
Title	Employees	Earnings	Degree
Home Health and Personal Care Aides	3,211,590	\$28,060	High school diploma or equivalent
Nursing Assistants	1,371,050	\$32,050	Postsecondary nondegree award
Medical Assistants	710,200	\$36,930	Postsecondary nondegree award
Dental Assistants	312,140	\$42,310	Postsecondary nondegree award
Phlebotomists	128,020	\$37,280	Postsecondary nondegree award
Veterinary Assistants and Laboratory Animal			
Caretakers	98,810	\$30,980	High school diploma or equivalent
Healthcare Support Workers, All Other	96,720	\$41,430	High school diploma or equivalent
Physical Therapist Assistants	92,740	\$59,440	Associate's degree
Massage Therapists	85,040	\$47,350	Postsecondary nondegree award
Medical Equipment Preparers	56,870	\$41,070	High school diploma or equivalent

Healthcare

Healthcare jobs fall into two major categories within the Census and BLS occupation classification scheme: "Healthcare Practitioners and Technical Occupations" and "Healthcare Support Occupations." Physicians, surgeons, nurses, physician assistants, and most medical technicians fall into the first category, whereas home health aides, nursing assistants, orderlies, and most medical occupations that include the word "assistant" or "aide" fall into the second category. The 10 most common occupations in these categories are presented in <u>Table 1A</u> and <u>1B</u> and a full list of occupations for both categories can be found in <u>Appendix A</u>.

Overall, Healthcare Practitioners and Technical Occupations includes most of the professions that require extensive education and training and as a result have higher pay compared to those considered Healthcare Support Occupations.

There is a wide range of wages within the healthcare sector of the care workforce as demonstrated in <u>Tables 1A</u> and <u>1B</u>. Occupations in the practitioner and technical category pay on average \$86,000 per year, whereas occupations in the support category have a much lower average wage of \$32,000 per year in the US. These amounts also hide substantial variety within the practitioner and technician category. Practitioners who diagnose or treat patients—including physicians and nurses—have an average annual salary of \$105,000, while health technologists and technicians make less than half as much on average at \$49,000. There is substantially less variety in healthcare support occupations.

Much of the difference in pay between the practitioner and technician and the support occupations is due to educational requirements: 65 percent of practitioner and technician jobs require a bachelor's degree or higher; virtually none of the support jobs require any type of college degree. The majority (57 percent) of healthcare support occupations only require a high school diploma with a substantial minority (41 percent) requiring some sort of postsecondary nondegree certificate. Most of the jobs in the practitioner and technical category that do not require a bachelor's degree are the lower paid health technologists and technicians, which commonly require an associate's degree (38 percent) or a postsecondary nondegree certificate much like those required for healthcare support positions.



FIGURE 1. Education Requirements for Healthcare Occupations



Healthcare occupations that only require a high school diploma typically pay relatively poorly at only \$30,000 per year with those that require a nondegree certificate bringing in more at about \$40,000. That corresponds to \$14 per hour and \$19 per hour respectively. The lowest paid individual occupations in healthcare are home health aides, personal care aides, physical therapist aides, veterinary assistants, orderlies, nursing assistants, pharmacy aides, and dietetic technicians, all of which have average hourly earnings of less than \$16 per hour. Despite this lower rate of pay, nursing assistants typically require a postsecondary nondegree certificate and dietetic technicians require an associate's degree.

TABLE 2. Income by Educational Attainment in Healthcare

Educational Attainment	Mean Annual Earnings
High School Diploma	\$29,906
Postsecondary Nondegree Award	\$40,002
Associate's Degree	\$65,147
Bachelor's Degree	\$76,926
Master's Degree	\$106,338
Doctoral or Professional Degree	\$165,754

TABLE 3. Ten Lowest Paid Occupations in Healthcare

Title	Employees	Mean Hourly Earnings	Mean Annual Earnings
Home Health and Personal Care Aides	3,211,590	\$13.49	\$28,060
Physical Therapist Aides	45,790	\$14.47	\$30,110
Veterinary Assistants and Laboratory Animal Caretakers	98,810	\$14.89	\$30,980
Orderlies	43,570	\$15.28	\$31,780
Nursing Assistants	1,371,050	\$15.41	\$32,050
Pharmacy Aides	38,900	\$15.50	\$32,250
Dietetic Technicians	26,430	\$15.83	\$32,920
Psychiatric Aides	51,550	\$16.01	\$33,300
Occupational Therapy Aides	5,630	\$16.42	\$34,160
Pharmacy Technicians	415,310	\$17.52	\$36,450

All of the highest paid occupations require either a medical or a dental degree with specialty fields of medical practice and surgery at the top of the income distribution. These professions, found in <u>Table 4</u>, all have average annual salaries above \$200,000. The only healthcare professions that require less than a doctoral or professional degree and have annual salaries above \$100,000 require a master's degree and include nurse anesthetists, physician assistants, nurse midwives, and nurse practitioners.

TABLE 4. Ten Highest Paid Occupations in Healthcare

Title	Employees	Mean Hourly Earnings	Mean Annual Earnings
Anesthesiologists	28,590	\$130.50	\$271,440
Surgeons, Except Ophthalmologists	37,900	\$120.99	\$251,650
Obstetricians and Gynecologists	18,900	\$114.96	\$239,120
Orthodontists	5,040	\$114.42	\$237,990
Oral and Maxillofacial Surgeons	4,120	\$112.98	\$234,990
Physicians, All Other; and Ophthalmologists, Except Pediatric	375,390	\$105.22	\$218,850
Psychiatrists	25,540	\$104.38	\$217,100
Prosthodontists	530	\$103.30	\$214,870
Family Medicine Physicians	98,590	\$103.06	\$214,370
General Internal Medicine Physicians	50,600	\$101.42	\$210,960

Childcare and Education

Education-related occupations fall within the BLS major group "Educational Institution and Library Occupations" and childcare workers fall within the "Personal Care and Service Occupations" group. Childcare work is the only occupation within personal services that we are considering a direct-care occupation for this brief. Personal care and service occupations include many of the occupations traditionally considered the service sector, including entertainment workers, barbers, hairstylists, and tour guides. While many of these occupations include substantial interaction with clients, they do not provide the type of direct care that meets our definition. Similarly, we include only the occupations within educational instruction that provide direct and necessary care including only the occupations that work to directly educate or support the education of students prior to adulthood. Specifically, we exclude all postsecondary teachers and professors as well as library occupations in research and postsecondary institutions. The full list of occupations is in Table 5.

Education workers and childcare workers are generally discussed separately in the labor economics literature in part because their workforces and funding are so different. Teachers require at least a bachelor's degree and are paid salaries that correspond with their educational attainment. In contrast, childcare workers, who primarily care for preschool-aged children, have no formal education requirements and often earn around minimum wage. The organizations with whom these segments are employed and the nature of the work are also fundamentally different. The vast majority (91 percent²⁴) of K-12 students are enrolled in public schools so the vast majority of teachers also work in public schools. Childcare workers more commonly work in privately run centers or private homes. Childcare work is also much more likely to be part-time and have irregular hours.²⁵

TABLE 5. Childcare and Education Occupations

Occupation	Employment	Mean Annual Earnings
Elementary School Teachers, Except Special Education	1,364,870	\$65,420
Teaching Assistants, Except Postsecondary	1,272,840	\$30,630
Secondary School Teachers, Except Special and Career/Technical Education	991,000	\$67,340
Middle School Teachers, Except Special and Career/ Technical Education	599,520	\$64,990
Substitute Teachers, Short-Term	512,030	\$36,090
Childcare Workers	494,360	\$26,790
Preschool Teachers, Except Special Education	370,940	\$36,550
Tutors and Teachers and Instructors, All Other	309,220	\$50,390
Self-Enrichment Teachers	222,700	\$47,930
Special Education Teachers, Kindergarten and Elementary School	191,170	\$64,790
Special Education Teachers, Secondary School	142,500	\$66,490
Kindergarten Teachers, Except Special Education	120,080	\$61,170
Special Education Teachers, Middle School	80,110	\$66,300
Career/Technical Education Teachers, Secondary School	73,530	\$65,870
Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors	42,910	\$59,810
Special Education Teachers, All Other	32,950	\$67,670
Special Education Teachers, Preschool	20,300	\$68,110
Career/Technical Education Teachers, Middle School	11,670	\$66,950

Despite these differences, these two sectors have one important commonality: education and childcare provide a place for children, especially young children, to be safe and cared for while parents are at work. The line between the two sectors can be blurred, particularly in states with preschool programs. In many areas, parents of children between the age of three and four can either select to entrust their children to childcare or a preschool run through their local school. It is based on this shared mission that we believe it is important to group education and childcare.

The average annual wage for care workers in the education sector is around \$53,000 and only around \$27,000 for workers in childcare. Much like within the healthcare workforce, there is a wide range of wages within the education workforce. The highest paid group within education are K-12 teachers. These teachers make on average between \$60,000 and \$68,000 with teachers that have specialized training—special education teachers, high school teachers, and career and technical education teachers at the top end of the distribution. Special education teachers make up 7 percent of the total workforce and nontraditional teachers, including career and technical education and adult education, make up only an additional 2 percent. The vast majority of teachers

are in traditional K-12 roles. The lowest paid teachers include kindergarten teachers (\$61,000) and adult education and ESL teachers (\$60,000), which may or may not be working in a K-12 education institution. Although teachers are the highest paid members of the education workforce, they make substantially less than the highest paid members of the healthcare workforce.

IPUMS CPS

The CPS is a monthly socioeconomic survey administered by the US Census Bureau²⁶ for the Bureau of Labor Statistics²⁷ (BLS) in order to understand the American workforce. The Annual Socioeconomic Supplement²⁸ is administered in March of each year to over 75,000 respondents and includes detailed information on income, poverty, and other socioeconomic and work characteristics of American households.

IPUMS CPS²⁹ uses individual month and year CPS microdata and harmonizes that data to be more directly comparable year-to-year as variables are added, deleted, or changed based on the topics that are of primary research interest at the time. Because we are interested in a 20 year time period, the harmonized CPS variables facilitate comparisons across time.

For this project we use data for the years 2000-21 and limit to individuals who report that they are currently in the workforce and employed. All gender, race, ethnicity, and other personal characteristics are included as listed in the CPS and IPUMS.

Occupational Classification

Occupation categorization is from the Standard Occupational Classification³⁰ (SOC), last updated by the BLS in 2018. SOC classifications group all working individuals into one of 867 individual detailed occupations and further group those workers into larger categories. The SOC classification is a federal statistical standard used by federal agencies to classify workers for the collection, use, and dissemination of data.

BLS Occupation and Wage Data

Primary data for wages by occupation are from the BLS wage data by area and occupation.³¹ The BLS provides detailed wage estimates for all occupations, occupations by state, and occupation by major metropolitan area. The BLS produces the data based on three surveys: National Compensation Survey, Occupational Employment Statistics Survey, and the Current Population Survey.

For this project we use the 2020 wage estimates.

The low variance in average teacher salaries by teacher type is likely due to the pay formulas of state education authorities and public school districts, which determine pay by tenure and education credentials. However, there is substantial variance across states and levels of experience. Teachers in Montana have the lowest starting salaries at \$32,000 compared to teachers in New Jersey who have an average starting salary of \$54,000.^{32, 33}

The lower end of the wage distribution of education workers includes tutors, self-enrichment teachers, substitute teachers, teaching assistants, and other types of teachers that are not otherwise categorized. The largest part of this group is teaching assistants who make up 20 percent of the education workforce. Teaching assistants are the lowest paid group in the education subsector making only \$31,000 on average which places them at about the same earnings as healthcare support workers. Notably, preschool teachers (excluding special education) are also among the lowest paid making on average just over half of what kindergarten teachers do (\$37,000 compared to \$61,000).

Childcare workers, who are not considered part of the education workforce by the BLS or Census, have even lower wages on average making \$27,000 per year, which translates to less than \$13 per hour. This is less than the average wage for any other occupation within the care workforce, including all health support occupations. The low pay for childcare workers is consistent with the education required; typically, childcare work requires only a high school diploma or GED and some childcare workers working in private homes may not even have a diploma. Notably, teaching assistants, whose pay is almost as low as that of childcare workers, generally have some college although no degree, short-term substitute teachers have a bachelor's degree. Childcare workers. who are not considered part of the education workforce by the BLS or Census have even lower wages on average making \$27,000 per year, which translates to less than \$13 per hour. This is less than the average wage for any other occupation within the care workforce. including all health support occupations.

Despite their low pay, childcare workers can have large effects on children's lives as children develop many important skills in early childhood³⁴ and can face lifelong consequences from negative shocks during that time.³⁵ Nurturing environments and high quality early childhood education programs have repeatedly been shown to improve outcomes for the adults who received these programs as children.³⁶ Low wages, poorly run or nonaccredited child centers, and poor levels of job satisfaction in childcare workers are associated with high staff turnover.³⁷

Within the education and childcare workforce, jobs that require a bachelor's degree generally make about twice the annual income as those that typically require anything less. The main occupation within this sector that requires a bachelor's degree is K-12

teaching. Despite the BLS considering a bachelor's degree the typical education level for teachers, more than half of all teachers who teach grade 1 or above have a master's degree or higher. Secondary school teachers of all teacher types are the most likely to have a master's or higher (56 percent) and elementary school teachers are the least likely (51 percent). Notably, roughly the same percentage of kindergarten and preschool teachers have master's degrees (16 percent) despite the fact that kindergarten teachers earn nearly twice as much on average. About one quarter of other lower wage education positions—adult basic education, tutors, non-specified teachers, and short-term substitutes—have a master's degree. The exception is teaching assistants, only 9 percent of which have a master's.

Community Support and Services

Community support and services occupations account for only 9 percent of the care workforce as we have defined it and fall mostly within the BLS category of "Community and Social Services Occupations." We included all occupations in that category with the exception of religious workers as we cannot distinguish religious workers involved in scholarship or administration from those involved in pastoral care. In addition, we included clinical, counseling, and school psychologists from the category of "Life, Physical, and Social Science Occupations."

		Mean Annual	
Title	Employment	Earnings	Education Required
Social and Human Service Assistants	399,920	\$38,230	High school diploma or equivalent
Child, Family, and School Social Workers	328,120	\$52,370	Bachelor's degree
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	293,620	\$51,550	Bachelor's degree
Educational, Guidance, and Career Counselors and Advisors	292,230	\$62,320	Master's degree
Healthcare Social Workers	176,110	\$60,470	Master's degree
Mental Health and Substance Abuse Social Workers	116,780	\$54,540	Master's degree
Clinical, Counseling, and School Psychologists	111,320	\$89,290	Doctoral or professional degree
Rehabilitation Counselors	100,260	\$42,080	Master's degree
Probation Officers and Correctional Treatment Specialists	90,070	\$61,900	Bachelor's degree
Community and Social Service Specialists, All Other	87,800	\$49,600	Bachelor's degree
Marriage and Family Therapists	60,850	\$56,890	Master's degree
Social Workers, All Other	60,390	\$64,940	Bachelor's degree
Community Health Workers	58,670	\$46,000	High school diploma or equivalent
Health Education Specialists	57,920	\$62,120	Bachelor's degree
Counselors, All Other	27,310	\$50,800	Master's degree

TABLE 6. Community Support and Services Occupations



This much smaller group of care occupations are also more closely related both in terms of the education required and average wage compared to the healthcare and education and childcare occupations. The highest paid occupation is clinical, counseling, and school psychologists who make on average \$89,000 per year and have a doctoral or professional degree. In contrast, the lowest paid occupation is social and human service assistants who make about \$38,000 per year and are listed as typically only requiring a high school degree. Despite this, 35 percent have a bachelor's degree and an additional 16 percent have a master's degree or higher. Overall, more than half of social and human service assistants have a bachelor's or higher and on average make less than \$40,000 per year.

In general, workers in these occupations have a more mixed educational background than those workers in the healthcare and education fields. One reason for this is that occupation titles are less regulated and dependent on state licenses with specific education requirements. Forty percent of workers in occupations that list a bachelor's as typical have a master's degree or higher (adjusted for total employment in the occupation) compared to 57 percent of workers in occupations listed as having a master's degree as typical. The wages in these occupations seem to recognize that distinction. Bachelor's degree occupations have average annual wages of \$54,000 and master's occupations only slightly higher at \$57,000. There is a significant positive correlation (.54) between the percent of an occupation with a master's and the average annual wage. Regardless of the typical education determined by the BLS, occupations with higher average levels of education have higher wages in the community service field.

Who Are the Main Members of This Workforce?

Employers are struggling to hire care workers and leaders in education and government are working to develop policies and programs that incentivize people to seek employment in this critical sector. The creation of an effective pipeline requires an understanding of who care workers are and any barriers they may face. In this section, we explore the demographics of the care workforce, including race/ethnicity, gender, educational attainment, and family. These findings can be used to inform the creation of effective workforce development policy.

Race, Gender, and Ethnicity

To examine this workforce, we employ 21 years of the Current Population Survey (CPS) as harmonized and cleaned in the IPUMS at the University of Minnesota, which allows data to be more easily compared across years.³⁸ The Annual Social and Economic Supplement (ASEC) to the CPS includes information on workers' families and home situations, their demographics, hours worked, wages, and various other job characteristics. IPUMS also harmonizes across different classifications of occupations to make it easier to compare changes in wages, occupations, and employment over time. Due to this classification structure, some of the groupings of occupations will be different from the previous section.



FIGURE 2. Care and Rest of Workforce by Gender

The care workforce looks different than those who work non-care focused jobs (Figure 2). Over the past 20 years, the largest difference between the care workforce and the rest of the workforce is the large prevalence of women. The care workforce is 79 percent women, whereas the overall workforce is only 47 percent women. Twenty-three percent of working women have jobs in the care workforce—nearly one in four—compared to only 6 percent of men.

Additionally, there are slight racial and ethnic differences between the care workforce and the rest of the workforce. The care workforce is slightly more likely to be white (68.2 percent vs. 67.0 percent) and Black (15.1 percent vs. 11.2 percent). The workforce is slightly less likely to be Hispanic (10.8 percent vs. 15.8 percent), or American Indian (1.5 percent vs. 1.6 percent), an immigrant, or noncitizen.

These slight overall differences in racial makeup obscure the outsized role Black women play in the care workforce. Nearly one-in-three (31 percent) working Black women are in the care workforce. By comparison, 13.8 percent of the total workforce are members of the care economy. Black women account for only 6 percent of the total workforce, but 12 percent of the care workforce. Given the relative importance to these sectors, it can be useful to take a deeper look at Black women and the jobs they take: The care workforce is 79 percent women, whereas the overall workforce is only 47 percent women. Twenty-three percent of working women have jobs in the care workforce—more than one in four—compared to only 6 percent of men.

- Black women in the care workforce tend to be more educated than their peers in other industries. Thirty-four percent of Black women in the care workforce have a bachelor's degree or higher compared to only 23 percent in other industries.
- Black women are heavily represented (compared to their percentage of the total workforce) in a number of high-education and high-earning care occupations, including social workers (19 percent), registered nurses (10 percent), and teaching (7 percent to 14 percent depending on grade level).
- Black women make up 18 percent of workers in "lower education" care occupations compared to only 9 percent of other care occupations. Black women are particularly overrepresented in some of the lowest paid care workforce jobs, including nursing, psychiatric, and home health aides (32 percent), licensed practical and licensed vocational nurses (23 percent), and personal care aides (20 percent).



FIGURE 3a. Care Economy Participation by Race/Ethnicity

FIGURE 3b. Percent of Different Populations Working in the Care Economy, 2000-2021



Total

Education

The care workforce on average has a much higher education level than the overall workforce. In the overall workforce, 34 percent of workers have a bachelor's degree or higher compared to a much larger 54 percent of the care workforce. The main reason for this is the large percentage of the care workforce occupations that require bachelor's degrees or higher, including teachers, doctors, and nurses, as discussed above. Educational attainment is correlated with a number of demographic factors making it difficult to directly compare the demographics of the care workforce with the non-care workforce. Instead, we focus on two types of workers—those with education below a bachelor's degree, including workers with some college, an associate's degree, or a postsecondary nondegree certificate, and workers with a bachelor's degree or higher. In the overall workforce, 34 percent of workers have a bachelor's degree or higher compared to a much larger 54 percent of the care workforce.

The demographics of workers in the care economy without a bachelor's degree look very different from two groups: their peers in the care economy with a bachelor's degree and their peers without a bachelor's degree in other sectors of the economy. Compared to their peers with a bachelor's, care workers without a four-year degree are much more likely to be people of color—specifically, Black or Hispanic; they are also more likely to be women, noncitizens, and first-generation Americans.



FIGURE 4. Workers without Bachelor's degree by Sex

When compared to workers in other industries who do not have a bachelor's, a similar pattern emerges. Women without a bachelor's in particular are over-represented in the care workforce. The vast majority of care workers without a bachelor's degree (86 percent) are women. Thirty-eight percent of women with a bachelor's degree work in the care workforce and 20 percent of women without a bachelor's degree work in the care workforce. By comparison, only 13 percent of men with a bachelor's degree or higher and 3 percent of men without a bachelor's degree are in the care workforce.

The support workers in the care workforce who do not have bachelor's degrees are also more likely to be Black, less likely to be Hispanic or white, and less likely to be non-citizen.

Variable	All Occupations	Care Workers	Rest of Workforce	Difference
White	74.68%	60.29%	63.79%	-3.51%
Black	8.64%	20.76%	12.49%	8.27%
Hispanic	7.10%	14.81%	19.50%	-4.69%
AAPI	9.56%	4.14%	4.14%	-0.01%
American Indian	0.89%	1.98%	1.90%	0.09%
People of Color (POC)	25.32%	39.71%	36.21%	3.51%
Women	49.16%	86.12%	41.43%	44.69%
Immigrants	16.73%	14.87%	17.93%	-3.06%
Non-Citizens	6.59%	6.18%	10.37%	-4.19%
First Generation	4.27%	4.46%	4.25%	0.20%

TABLE 7. Workers' Without A Bachelor's by Race, Gender, and Citizenship Status

Marriage and Family

As was illustrated most recently by the COVID-19 pandemic, women are still the primary caretakers for children in most families,³⁹ so the needs of a majority-woman workforce are different from a male-dominated or even mixed workplace. Over half (53 percent) of women in the care workforce have their own children still living in the household and that percentage jumps to 60 percent for women between the ages of 18 and 50. Women in the care workforce are slightly more likely to have children living at home than those in other occupations (45 percent) and that difference is consistent for women between the age of 18 and 50. Even when controlling for demographic differences between the care workforce and the rest of the workforce, women in the care workforce are difference is compared to similar working women.

Women in the care workforce are more likely to be married, rather than divorced or single, than women in other industries. Fifty-eight percent of women in the care workforce are married compared to 52 percent of other working women. However, that six-point difference is largely driven by demographic characteristics. When controlling for demographics the difference shrinks to only 3 percentage points. Overall, 58 percent of women in the care workforce are married, 52 percent have a child living at home, and 15 percent have a child under the age of five living at home. Notably, women without a bachelor's degree in the care workforce are significantly less likely to be married than women who do (50 percent compared to 65 percent) but almost equally likely to have children in the home (53 percent compared to 52 percent). These findings suggest the struggles facing working parents are more intensely felt in the care workforce than other workplaces. Disruptions to school and childcare shortages are going to impact work decisions faced by these employees. Mothers with children in the home have been the least likely to return to the workforce after the pandemic⁴⁰ and they make up 41 percent of the care workforce. Some of this is age determined; women who have bachelor's degrees tend to be older and older women are more likely to be married and have children. However, even controlling flexibly for age, women with a bachelor's in the care workforce are statistically significantly more likely to be married and less likely to have children living at home.

Socioeconomic Measures of Well-Being

Women in the care workforce are generally better off than other workers due largely to the fact that they, on average, have higher levels of education. Women in the care workforce are more likely to live in homes that they own, more likely to have health insurance, and more likely to be geographically stable in that they are less likely to have moved to a new state or county in the last year. However, demographics are not the only determining factor. When comparing only women with the same demographics in and out of the care workforce, women in the care workforce are still about 1 percent more likely to own their home, 1 percent more likely to be currently attending college, half a percentage point less likely to have recently moved, and 2 percent more likely to have health insurance. These differences are not large, but they are statistically significant even when comparing similar women in and out of the care workforce.

There are also profound differences in economic well-being between women in the care workforce who do and do not have bachelor's degrees. Seventy-nine percent of women with a bachelor's or higher in the care workforce own their own homes compared to only 65 percent of women with less than a bachelor's. Similarly, 96 percent of women in the care workforce with a four-year degree or higher have health insurance compared to only 88 percent of other workers. More than one-inten women in the care workforce who have below a bachelor's degree do not have health insurance. Conversely, women with higher degrees of education are less geographically stable and more likely to have moved to a new county or state in the previous year.

	Raw Differences	Differences Controlling for Demographics
Owns Home	0.03***	0.010***
Has a Child in the Home	0.07***	0.06***
Has a Child under 5 in the Home	0.03***	0.02***
Works Full Time (>35 hours)	0.010***	-0.02***
In College	-0.001***	0.008***
New to State	-0.002***	-0.004***
New to County	-0.002***	-0.004***
New to United States	-0.0004***	-0.0005***
Has Health Insurance	0.04***	0.02***
Currently Married	0.06***	0.03***

TABLE 8. Differences in Women in Care Occupations vs. Other Occupations

NOTES: Demographics include age, age square, indicators for highest level of education, indicators for race and ethnicity, and the natural log of personal income and family income.

*** All differences are statistically significant at the 1 percent level (p<.01).

The Care Workforce in New York

Wages

New York is on average a higher wage and cost of living state than the US as a whole. According to the BLS, the mean annual wage in New York was \$67,850, which is 20.5 percent higher than the national average wage of \$56,310. New York also has one of the highest costs of living and is beaten only by California, Massachusetts, and Hawaii.⁴¹ Care workers are no exception to this pattern. On average care workers in New York make 17.3 percent more than the national average.

The highest premiums are paid to occupations that require a bachelor's degree. Bachelor's degree care workforce jobs pay on average 25 percent more in New York largely due to higher pay for teachers. Elementary school teachers in New York, for example, have an average annual income of \$84,380, which is 29.0 percent higher than the \$65,420 national average.

New York also has one of the highest minimum wages in the country,⁴² which results in larger wage premiums for some lower paid professions. Childcare workers in New York make 17 percent more than the national pay rate, which is the average across all occupations in the state. Some lower paid medical support occupations pay substantially better in New York than the rest of the country. Orderlies, nursing assistants, dietetic technicians, psychiatric aides, and occupational therapy aides all have wages 30 percent higher than the national average. Occupational therapy aides have incomes nearly twice the national average. There are only 15 jobs out of the 106 care occupations with lower average salaries in New York than nationally and only three of them—acupuncturists and other healthcare diagnosing and treating practitioners, rehabilitation counselors, and medical transcriptionists—have a differential of greater than 10 percent.

Demographics

The demographic makeup of the New York care workforce is very similar to the national workforce but has some important differences. The New York State care workforce is relatively larger than the national care workforce. About one-in-five (19 percent) of New York workers are employed in the care workforce compared to 16 percent of workers nationally. <u>Table 9</u> breaks down the differences between the national care workforce and the New York workforce.

Demographic	New York	United States	Percent Difference
Sex			
Female	79.0%	79.4%	-0.4%
Male	21.0%	20.6%	1.5%
Race			
White	59.8%	68.2%	-12.3%
Black	22.6%	15.1%	49.8%
Hispanic	13.0%	10.7%	21.5%
People of Color	40.2%	31.8%	26.4%

TABLE 9. Difference between National and New York State Care Workforce by Sex and Race

The New York care workforce is much less white than the national care workforce. Workers in New York are 12 percent less likely to be white, 50 percent more likely to be black, and 22 percent more likely to be Hispanic. The New York care workforce is 60

percent white, 23 percent Black, and 13 percent Hispanic. In New York, the care workforce is also older, with 10 percent fewer workers under 30 and 9 percent more workers over 65.

The most striking demographic difference, however, is the presence of immigrant and first generation workers in the care workforce. In New York, 29 percent of the care workforce has immigrated to the US and an additional 8 percent is the child of an immigrant. This is substantially larger than the 14 percent of the national care workforce who are immigrants and 4 percent of the national workforce that are first generation. This difference is driven by the state's demographics—28 percent of the New York workforce as a whole are immigrants compared to 16 percent of the US workforce. Unlike in the country as a whole where Workers in New York are 12 percent less likely to be white, 50 percent more likely to be black, and 22 percent more likely to be Hispanic. immigrants are underrepresented in the care workforce, in New York, they are slightly overrepresented relative to the general population.

	New York	United States	Percent Difference
Immigrant	29.0%	14.2%	104.0%
Non-Citizen	10.0%	5.0%	98.6%
First Generation	7.7%	4.4%	75.7%

TABLE 10. Difference between National and New York State Care Workforce by Citizen Status

There are also some significant differences in measures of social well-being. Care workers in New York are more geographically stable than other care workers (already a geographically stable group) and are 51 percent less likely to have moved to the state and 37 percent less likely to have moved to the country in the last year. Despite this stability, New York care workers are less likely to own their own home. Nationally, 72 percent of care workers own their homes compared to only 61 percent of New York care workers. This difference is consistent with the general difference in home ownership between New York and the rest of the country. There is also a larger gap in education in the New York care workforce. New Yorker care workers are both 22 percent more likely to have at most a high school degree and 29 percent more likely to have a graduate degree than the national average for the care workforce.

Looking Forward

The pandemic highlighted the importance of healthcare, education, and social services. These sectors make up the care economy. The care economy workforce is unique in that it is dominated by women. On average, women in the care workforce have higher education and earn more than women working in other sectors of the economy. Considering only the average, however, obscures the large section of the care workforce that are in support jobs such as childcare workers, home health aides, and nursing aides. These positions do not require a four-year degree and as result do not pay as well as the doctors and teachers who also work in the sector. The women in these support positions earn close to minimum wage and women of color are overrepresented in these positions. Many of the advantages of being in the care workforce—higher pay, more stability, medical insurance, home ownership—are only realized by those in jobs that require higher levels of education or specialized training.

Now is the time to understand and invest in the nation's care infrastructure. The demand for care economy services and care workers will increase dramatically over the next 10 to 50 years even as the pandemic recedes. The number of Americans age 65 or older is expected to more than double over the next 40 years⁴³ and 70 percent of those who live to 65 are expected to need some kind of long-term care service and support,⁴⁴ which will result in increased demand for aging care services. According to the BLS, the demand for home health and personal care aides is expected to be seven

times higher by 2030 and the demand for registered nurses, pharmacy technicians, nursing assistants, and pharmacists nearly three times as high. An increased demand for healthcare is not the only factor driving up employment in the care workforce. The demand for elementary school teachers and special education teachers is expected to double.

Building and maintaining a high-quality care workforce is a complex undertaking that will require leadership and support from all levels of government, the private sector, and universities and colleges. Beyond creating additional training and education opportunities, the sector will also need to address the low wages, poor benefits, and high stress and external pressures that have caused many workers to leave positions or choose other employment. Future policy decisions need to take into account who the people are who work in these occupations and their needs as employees. In addition to meeting the needs of the existing care workforce, these occupations will need to find ways to attract new types of workers as demand grows. This report provides information that policymakers should consider as they prepare for the future of the state and nation's care economy.

Appendix A

Jobs In the Care Economy

	Total Employment	Annual Mean	Projected Employment Change	Typical Education Needed	Work Experience In a Related	Typical On-the-Job Training Needed to Attain Competency in the	Care Economy
Occupation Title	(US)	Wage	2021-31	for Entry	Occupation	Occupation	Categories
Clinical, Counseling, and School Psychologists	111,320	\$89,290	5.5	Master's degree	None	Internship/ residency	Community Support and Services
Educational, Guidance, and Career Counselors and Advisors	292,230	\$62,320	9.6	Master's degree	None	None	Community Support and Services
Marriage and Family Therapists	60,850	\$56,890	13.9	Master's degree	None	Internship/ residency	Community Support and Services
Rehabilitation Counselors	100,260	\$42,080	10.5	Master's degree	None	None	Community Support and Services
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	293,620	\$51,550	22.1	Bachelor's degree	None	None	Community Support and Services
Counselors, All Other	27,310	\$50,800	9.6	Master's degree	None	None	Community Support and Services
Child, Family, and School Social Workers	328,120	\$52,370	8.3	Bachelor's degree	None	None	Community Support and Services
Healthcare Social Workers	176,110	\$60,470	11.1	Master's degree	None	Internship/ residency	Community Support and Services
Mental Health and Substance Abuse Social Workers	116,780	\$54,540	11.1	Master's degree	None	Internship/ residency	Community Support and Services
Social Workers, All Other	60,390	\$64,940	2.9	Bachelor's degree	None	None	Community Support and Services
Health Education Specialists	57,920	\$62,120	7.6	Bachelor's degree	None	None	Community Support and Services
Probation Officers and Correctional Treatment Specialists	90,070	\$61,900	0.1	Bachelor's degree	None	Short-term on-the-job training	Community Support and Services
Social and Human Service Assistants	399,920	\$38,230	12.5	High school diploma or equivalent	None	Short-term on-the-job training	Community Support and Services
Community Health Workers	58,670	\$46,000	15.9	High school diploma or equivalent	None	Short-term on-the-job training	Community Support and Services
Community and Social Service Specialists, All Other	87,800	\$49,600	8.5	Bachelor's degree	None	None	Community Support and Services
Preschool Teachers, Except Special Education	370,940	\$36,550	15.1	Associate's degree	None	None	Child Care and Education
Kindergarten Teachers, Except Special Education	120,080	\$61,170	4.3	Bachelor's degree	None	None	Child Care and Education
Elementary School Teachers, Except Special Education	1,364,870	\$65,420	4.0	Bachelor's degree	None	None	Child Care and Education

Occupation Title	Total Employment (US)	Annual Mean Wage	Projected Employment Change 2021-31	Typical Education Needed for Entry	Work Experience In a Related Occupation	Typical On-the-Job Training Needed to Attain Competency in the Occupation	Care Economy Categories
Middle School Teachers, Except Special and Career/Technical Education	599,520	\$64,990	4.1	Bachelor's degree	None	None	Child Care and Education
Career/Technical Education Teachers, Middle School	11,670	\$66,950	3.4	Bachelor's degree	Less than 5 years	None	Child Care and Education
Secondary School Teachers, Except Special and Career/ Technical Education	991,000	\$67,340	4.6	Bachelor's degree	None	None	Child Care and Education
Career/Technical Education Teachers, Secondary School	73,530	\$65,870	3.3	Bachelor's degree	Less than 5 years	None	Child Care and Education
Special Education Teachers, Preschool	20,300	\$68,110	8.3	Bachelor's degree	None	None	Child Care and Education
Special Education Teachers, Kindergarten and Elementary School	191,170	\$64,790	3.8	Bachelor's degree	None	None	Child Care and Education
Special Education Teachers, Middle School	80,110	\$66,300	3.5	Bachelor's degree	None	None	Child Care and Education
Special Education Teachers, Secondary School	142,500	\$66,490	4.2	Bachelor's degree	None	None	Child Care and Education
Special Education Teachers, All Other	32,950	\$67,670	6.8	Bachelor's degree	None	None	Child Care and Education
Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors	42,910	\$59,810	9.6	Bachelor's degree	None	None	Child Care and Education
Self-Enrichment Teachers	222,700	\$47,930	22.0	High school diploma or equivalent	Less than 5 years	None	Child Care and Education
Substitute Teachers, Short-Term	512,030	\$36,090	4.7	Bachelor's degree	None	None	Child Care and Education
Tutors and Teachers and Instructors, All Other	309,220	\$50,390	16.6	Some college, no degree	None	None	Child Care and Education
Teaching Assistants, Except Postsecondary	1,272,840	\$30,630	5.0	Some college, no degree	None	None	Child Care and Education
Childcare Workers	494,360	\$26,790	6.5	High school diploma or equivalent	None	Short-term on-the-job training	Child Care and Education
Chiropractors	34,760	\$83,830	10.4	Doctoral or professional degree	None	None	Health Care Practitioner or Technical
Dentists, General	95,920	\$180,830	6.1	Doctoral or professional degree	None	None	Health Care Practitioner or Technical
Oral and Maxillofacial Surgeons	4,120	\$234,990	4.6	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical

Occupation Title	Total Employment (US)	Annual Mean Wage	Projected Employment Change 2021-31	Typical Education Needed for Entry	Work Experience In a Related Occupation	Typical On-the-Job Training Needed to Attain Competency in the Occupation	Care Economy Categories
Orthodontists	5,040	\$237,990	4.5	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Prosthodontists	530	\$214,870	5.1	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Dentists, All Other Specialists	5,610	\$194,930	0.8	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Dietitians and Nutritionists	66,330	\$64,150	6.8	Bachelor's degree	None	Internship/ residency	Health Care Practitioner or Technical
Optometrists	36,690	\$125,440	9.6	Doctoral or professional degree	None	None	Health Care Practitioner or Technical
Pharmacists	315,470	\$125,460	2.4	Doctoral or professional degree	None	None	Health Care Practitioner or Technical
Physician Assistants	125,280	\$116,080	27.6	Master's degree	None	None	Health Care Practitioner or Technical
Podiatrists	9,710	\$151,110	2.0	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Occupational Therapists	126,610	\$87,480	13.9	Master's degree	None	None	Health Care Practitioner or Technical
Physical Therapists	220,870	\$91,680	16.9	Doctoral or professional degree	None	None	Health Care Practitioner or Technical
Radiation Therapists	17,390	\$94,300	6.3	Associate's degree	None	None	Health Care Practitioner or Technical
Recreational Therapists	20,080	\$51,260	3.6	Bachelor's degree	None	None	Health Care Practitioner or Technical
Respiratory Therapists	131,890	\$65,640	13.6	Associate's degree	None	None	Health Care Practitioner or Technical
Speech-Language Pathologists	148,450	\$83,240	21.3	Master's degree	None	Internship/ residency	Health Care Practitioner or Technical
Exercise Physiologists	7,330	\$54,020	9.1	Bachelor's degree	None	None	Health Care Practitioner or Technical
Therapists, All Other	11,710	\$62,090	11.2	Bachelor's degree	None	None	Health Care Practitioner or Technical
Veterinarians	73,710	\$108,350	19.4	Doctoral or professional degree	None	None	Health Care Practitioner or Technical
Registered Nurses	2,986,500	\$80,010	6.2	Bachelor's degree	None	None	Health Care Practitioner or Technical

Occupation Title	Total Employment (US)	Annual Mean Wage	Projected Employment Change 2021-31	Typical Education Needed for Entry	Work Experience In a Related Occupation	Typical On-the-Job Training Needed to Attain Competency in the Occupation	Care Economy Categories
Nurse Anesthetists	41,960	\$189,190	11.8	Master's degree	None	None	Health Care Practitioner or Technical
Nurse Midwives	7,120	\$115,540	7.5	Master's degree	None	None	Health Care Practitioner or Technical
Nurse Practitioners	211,280	\$114,510	45.7	Master's degree	None	None	Health Care Practitioner or Technical
Audiologists	13,300	\$89,230	10.4	Doctoral or professional degree	None	None	Health Care Practitioner or Technical
Anesthesiologists	28,590	\$271,440	1.1	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Family Medicine Physicians	98,590	\$214,370	3.3	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
General Internal Medicine Physicians	50,600	\$210,960	2.0	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Obstetricians and Gynecologists	18,900	\$239,120	1.7	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Pediatricians, General	27,550	\$184,570	1.1	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Psychiatrists	25,540	\$217,100	8.7	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Physicians, All Other; and Ophthalmologists, Except Pediatri	c 375,390	\$218,850	2.4	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Surgeons, Except Ophthalmologists	37,900	\$251,650	3.4	Doctoral or professional degree	None	Internship/ residency	Health Care Practitioner or Technical
Dental Hygienists	194,830	\$78,050	8.9	Associate's degree	None	None	Health Care Practitioner or Technical
Acupuncturists and Healthcare Diagnosing or Treating Practitioners, All Other	36,070	\$97,270	3.9	Master's degree	None	None	Health Care Practitioner or Technical
Clinical Laboratory Technologists and Technicians	326,220	\$55,990	6.6	Bachelor's degree	None	None	Health Care Practitioner or Technical
Cardiovascular Technologists and Technicians	55,980	\$60,940	4.6	Associate's degree	None	None	Health Care Practitioner or Technical
Diagnostic Medical Sonographers	73,920	\$77,790	14.7	Associate's degree	None	None	Health Care Practitioner or Technical
Nuclear Medicine Technologists	17,510	\$82,080	1.7	Associate's degree	None	None	Health Care Practitioner or Technical

	Total Employment	Annual Mean	Projected Employment Change	Typical Education Needed	Work Experience In a Related	Typical On-the-Job Training Needed to Attain Competency in the	Care Economy
Occupation Title Radiologic Technologists and	(US)	Wage	2021-31	for Entry Associate's	Occupation	Occupation	Categories Health Care Practitioner
Technicians	206,720	64,840	6.3	degree	None	None	or Technical
Magnetic Resonance Imaging Technologists	39,270	\$75,960	7.2	Associate's degree	Less than 5 years	None	Health Care Practitioner or Technical
Emergency Medical Technicians and Paramedics	257,700	\$40,370	6.9	Postsecondary nondegree award	Less than 5 years	None	Health Care Practitioner or Technical
Dietetic Technicians	26,430	\$32,920	4.7	Associate's degree	None	None	Health Care Practitioner or Technical
Pharmacy Technicians	415,310	\$36,450	5.0	High school diploma or equivalent	None	Moderate-term on-the-job training	Health Care Practitioner or Technical
Psychiatric Technicians	85,330	\$38,080	10.9	Postsecondary nondegree award	Less than 5 years	Short-term on-the-job training	Health Care Practitioner or Technical
Surgical Technologists	107,400	\$51,510	5.9	Postsecondary nondegree award	None	None	Health Care Practitioner or Technical
Veterinary Technologists and Technicians	109,490	\$37,860	19.6	Associate's degree	None	None	Health Care Practitioner or Technical
Ophthalmic Medical Technicians	59,960	\$40,010	14.7	Postsecondary nondegree award	None	None	Health Care Practitioner or Technical
Licensed Practical and Licensed Vocational Nurses	676,440	\$50,090	6.3	Postsecondary nondegree award	None	None	Health Care Practitioner or Technical
Opticians, Dispensing	68,180	\$41,380	3.7	High school diploma or equivalent	None	Long-term on-the-job training	Health Care Practitioner or Technical
Orthotists and Prosthetists	9,550	\$74,120	16.8	Master's degree	None	Internship/ residency	Health Care Practitioner or Technical
Hearing Aid Specialists	7,770	\$54,630	15.7	High school diploma or equivalent	None	Moderate-term on-the-job training	Health Care Practitioner or Technical
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, Al Other	1 318,010	\$48,270	6.7	Postsecondary nondegree award	None	None	Health Care Practitioner or Technical
Athletic Trainers	27,430	\$52,230	17.5	Master's degree	None	None	Health Care Practitioner or Technical
Genetic Counselors	2,280	\$89,710	18.2	Master's degree	None	None	Health Care Practitioner or Technical

Occupation Title	Total Employment (US)	Annual Mean Wage	Projected Employment Change 2021-31	Typical Education Needed for Entry	Work Experience In a Related Occupation	Typical On-the-Job Training Needed to Attain Competency in the Occupation	Care Economy Categories
Health Information Technologists.				,			
Medical Registrars, Surgical Assistants, and Healthcare Practitioners and Technical Workers, All Other	76,670	\$60,900	5.7	Postsecondary nondegree award	None	None	Health Care Practitioner or Technical
Home Health and Personal Care Aides	3,211,590	\$28,060	25.4	High school diploma or equivalent	None	Short-term on-the-job training	Health Care Support
Nursing Assistants	1,371,050	\$32,050	4.7	Postsecondary nondegree award	None	None	Health Care Support
Orderlies	43,570	\$31,780	4.7	High school diploma or equivalent	None	Short-term on-the-job training	Health Care Support
Psychiatric Aides	51,550	\$33,300	4.6	High school diploma or equivalent	None	Short-term on-the-job training	Health Care Support
Occupational Therapy Assistants	42,750	\$63,420	25.4	Associate's degree	None	None	Health Care Support
Occupational Therapy Aides	5,630	\$34,160	13.6	High school diploma or equivalent	None	Short-term on-the-job training	Health Care Support
Physical Therapist Assistants	92,740	\$59,440	26.5	Associate's degree	None	None	Health Care Support
Physical Therapist Aides	45,790	\$30,110	18.8	High school diploma or equivalent	None	Short-term on-the-job training	Health Care Support
Massage Therapists	85,040	\$47,350	20.0	Postsecondary nondegree award	None	None	Health Care Support
Dental Assistants	312,140	\$42,310	8.4	Postsecondary nondegree award	None	None	Health Care Support
Medical Assistants	710,200	\$36,930	15.8	Postsecondary nondegree award	None	None	Health Care Support
Medical Equipment Preparers	56,870	\$41,070	6.0	High school diploma or equivalent	None	Moderate-term on-the-job training	Health Care Support
Medical Transcriptionists	49,530	\$37,310	-6.5	Postsecondary nondegree award	None	None	Health Care Support
Pharmacy Aides	38,900	\$32,250	-2.9	High school diploma or equivalent	None	Short-term on-the-job training	Health Care Support

Occupation Title	Total Employment (US)	Annual Mean Wage	Projected Employment Change 2021-31	Typical Education Needed for Entry	Work Experience In a Related Occupation	Typical On-the-Job Training Needed to Attain Competency in the Occupation	Care Economy Categories
Veterinary Assistants and Laboratory Animal Caretakers	98,810	\$30,980	19.4	High school diploma or equivalent	None	Short-term on-the-job training	Health Care Support
Phlebotomists	128,020	\$37,280	10.2	Postsecondary nondegree award	None	None	Health Care Support
Healthcare Support Workers, All Other	96,720	\$41,430	6.6	High school diploma or equivalent	None	None	Health Care Support

Endnotes

- Leila Schochet, The Child Care Crisis Is Keeping Women Out of the Workforce, Investing in Care Is Essential Infrastructure series (Washington, DC: Center for American Progress, March 2019), https://www.americanprogress.org/article/child-care-crisis-keeping-women-workforce/.
- 2 Bob Woods, "America's \$103 billion home health-care system is in crisis as worker shortage worsens," *CNBC*, April 9, 2019, <u>https://www.cnbc.com/2019/04/09/us-home-healthcare-system-is-in-crisis-as-worker-shortages-worsen.html</u>.
- 3 Maggie Galehouse, "What's behind the nursing shortage? How can we fix it?" Texas Medical Center, August 2, 2019, <u>https://www.tmc.edu/news/2019/08/whats-behind-the-nursing-shortage-how-can-we-fix-it/</u>.
- 4 Emma García and Elaine Weiss, The teacher shortage is real, large and growing, and worse than we thought: The first report in 'The Perfect Storm in the Teacher Labor Market' series (Washington, DC: Economic Policy Institute, March 26, 2019), <u>https://www.epi.org/publication/the-teacher-shortageis-real-large-and-growing-and-worse-than-we-thought-the-first-report-in-the-perfect-storm-inthe-teacher-labor-market-series/.</u>
- 5 Heather Long, "'The pay is absolute crap': Child-care workers are quitting rapidly, a red flag for the economy," Washington Post, September 19, 2021, <u>https://www.washingtonpost.com/</u> <u>business/2021/09/19/childcare-workers-quit/</u>.
- 6 Adrian Diaz, et al., "Elective surgery in the time of COVID-19," *The American Journal of Surgery* 219, 6 (June 2020): 900–2, <u>https://doi.org/10.1016/j.amjsurg.2020.04.014</u>.
- 7 Megan Leonhard, "16,000 childcare providers shut down in the pandemic. It's a really big deal," Fortune, February 9, 2022, <u>https://fortune.com/2022/02/09/child-care-providers-shut-down-pandemic/</u>.
- 8 John Leland, "She Had to Choose: Her Epileptic Patient or Her 7-Year-Old Daughter," *New York Times*, March 22, 2020, <u>https://www.nytimes.com/2020/03/22/nyregion/coronavirus-caregivers-nyc.html</u>.
- 9 "An Economist's View on the Care Economy," US Department of Labor Blog, August 11, 2021, https://blog.dol.gov/2021/08/11/an-economists-view-on-the-care-economy.
- 10 Mark Lieberman, "What America Spends on K-12: The Latest Federal Snapshot," *Education Week*, May 11, 2022, <u>https://www.edweek.org/policy-politics/what-america-spends-on-k-12-the-latest-federal-snapshot/2022/05</u>.
- 11 Erika Chen, "K-12 School Spending Up 4.7% in 2019 From Previous Year," US Census Bureau: America Counts: Stories Behind the Numbers, May 18, 2021, <u>https://www.census.gov/library/</u> stories/2021/05/united-states-spending-on-public-schools-in-2019-highest-since-2008.html.
- 12 Ryan Nunn, Jana Parsons, and Jay Shambaugh, *A Dozen Facts About the Economics of the U.S. Health-Care System* (Washington, DC: The Hamilton Project, Brookings, March 2020), <u>https://www.brookings.edu/research/a-dozen-facts-about-the-economics-of-the-u-s-health-care-system/.</u>
- 13 Centers for Medicare & Medicaid Services, "National Health Spending in 2020 Increases due to Impact of COVID-19 Pandemic," news release, December 15, 2021, <u>https://www.cms.gov/newsroom/press-releases/national-health-spending-2020-increases-due-impact-covid-19-pandemic</u>.
- 14 Ibid.
- 15 Gaëlle Ferrant, Luca Maria Pesando, and Keiko Nowacka, *Unpaid Care Work: The missing link in the analysis of gender gaps in labour outcomes* (Paris, France: OECD Development Center, December 2014), https://www.oecd.org/dev/development-gender/Unpaid_care_work.pdf.
- 16 Ayelet Sheffey, "Unpaid care-economy work amounts to \$11 trillion per year, BofA estimates," *Business Insider*, May 12, 2021, <u>https://www.businessinsider.com/care-economy-unpaid-work-minimum-wage-jobs-labor-infrastructure-bofa-2021-5</u>.
- 17 Gus Wezerek and Kristen R. Fhodsee, "Opinion: Women's Unpaid Labor is Worth \$10,900,000,000,000," *New York Times*, March 5, 2020, <u>https://www.nytimes.com/</u> interactive/2020/03/04/opinion/women-unpaid-labor.html.

- 18 Kate Power, "The COVID-19 pandemic has increased the care burden of women and families," Sustainability: Science, Practice and Policy 16, 1, https://doi.org/10.1080/15487733.2020.1776561.
- 19 "Education and Health Services," US Bureau of Labor Statistics, accessed September 22, 2022, https://www.bls.gov/iag/tgs/iag65.htm.
- 20 Liliana E. Pezzin, et al., "Does Publicly Provided Home Care Substitute for Family Care? Experimental Evidence with Endogenous Living Arrangements," *The Journal of Human Resources* 31, 3 (1996): 650–76, <u>https://doi.org/10.2307/146270</u>.
- 21 "Browse by Work Activities: Assisting and Caring for Others," O*Net OnLine, accessed November 2, 2022, <u>https://www.onetonline.org/find/descriptor/result/4.A.4.a.5</u>.
- 22 "Occupational Employment and Wage Statistics," US Bureau of Labor Statistics, accessed November 2, 2022, <u>https://www.bls.gov/oes/current/oes_stru.htm</u>.
- 23 Census and BLS have added, deleted, and recategorized occupations over the years so some occupation titles will be combined in discussion, others are included as part of larger categories. No occupation title that was ever a "care workforce" job by our definition has been categorized as a non-care workforce job.
- 24 "Fast Facts: Public and Private School Comparison," National Center for Education Statistics, accessed November 2, 2022, https://nces.ed.gov/fastfacts/display.asp?id=55.
- 25 "Childcare Workers" in *Occupational Outlook Handbook* (Washington: US Bureau of Labor Statistics, U.S. Department of Labor, last modified October 4, 2022), <u>https://www.bls.gov/ooh/personal-careand-service/childcare-workers.htm</u>.
- 26 "Measuring America's People, Places, and Economy," US Census Bureau, accessed November 4, 2022, <u>https://www.census.gov/en.html</u>.
- 27 US Bureau of Labor Statistics, accessed November 4, 2022, https://www.bls.gov/.
- 28 "Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS)," US Census Bureau, accessed November 4, 2022, <u>https://www.census.gov/programs-surveys/saipe/guidance/model-input-data/cpsasec.html</u>.
- 29 "Current Population Survey Data for Social, Economic and Health Research," IPUMS Current Population Survey (CPS), accessed November 4, 2022, <u>https://cps.ipums.org/cps/</u>.
- 30 "Industry and Occupation Classifaction," US Census Bureau, accessed November 4, 2022, <u>https://www.census.gov/programs-surveys/cps/technical-documentation/methodology/industry-and-occupation-classification.html</u>.
- 31 "Occupational Employment and Wage Statistics," US Bureau of Labor Statistics, accessed November 4, 2022, <u>https://www.bls.gov/oes/</u>.
- 32 NEA Collective Bargaining and Member Advocacy Department, Teacher Salary Benchmarks (Washington, DC: National Education Association, April 26, 2022), <u>https://www.nea.org/resource-library/teacher-salary-benchmarks</u>.
- 33 "Table 211.60. Estimated average annual salary of teachers in public elementary and secondary schools, by state, Selected years, 1969–70 through 2016–17," Digest of Education Statistics, National Center for Education Statistics, prepared August 2017, <u>https://nces.ed.gov/programs/ digest/d17/tables/dt17_211.60.asp.</u>
- 34 James J. Heckman, "The Economics of Inequality: The Value of Early Childhood Education," American Educator 35, 1 (2011): 31–5, <u>https://eric.ed.gov/?id=EJ920516</u>.
- 35 Janet Currie and Douglas Almond, "Chapter 15—Human Capital Development before Age Five" in Handbook of Labor Economics, Volume 4, Part B (Princeton, NJ: Princeton University, 2011): 1315–486, <u>https://doi.org/10.1016/S0169-7218(11)02413-0</u>.
- 36 Sneha Elango, et al., "Early Childhood Education" in *Economics of Means-Tested Transfer Programs in the United States, Volume 2* (University of Chicago Press, 2015): 235–97, <u>https://www.nber.org/system/files/chapters/c13489/c13489.pdf</u>.
- 37 Casey J. Totenhagen, et al., "Retaining Early Childhood Education Workers: A Review of the Empirical Literature," *Journal of Research in Childhood Education* 30, 4 (2016): 585–99, <u>https://doi.org/10.1080/02568543.2016.1214652</u>.

- 38 Sarah Flood, et al., Integrated Public Use Microdata Series, Current Population Survey: Version 9.0 [dataset] (Minneapolis, MN: IPUMS, 2021), <u>https://doi.org/10.18128/D030.V9.0</u>.
- 39 "Women, Caregiving, and COVID-19," Centers for Disease Control and Prevention, last reviewed June 21, 2022, <u>https://www.cdc.gov/women/caregivers-covid-19/index.html</u>.
- 40 Shelley Zalis, "Moms Are Less Likely To Return To The Workforce Post-Covid—Here's How Employers Can Help," *Forbes*, September 9, 2021, <u>https://www.forbes.com/sites/shelleyzalis/2021/09/09/moms-are-less-likely-to-return-to-the-workforce-post-covid-heres-how-employers-can-help/?sh=2e984d0a4d72</u>.
- 41 "Cost of Living Data Series," Missouri Economic Research and Information Center, accessed November 2, 2022, <u>https://meric.mo.gov/data/cost-living-data-series</u>.
- 42 "Consolidated Minimum Wage Table," US Department of Labor, revised July 1, 2022, <u>https://www.dol.gov/agencies/whd/mw-consolidated</u>.
- 43 "Project: The US Population is Aging," Urban Institute, accessed November 2, 2022, <u>https://www.urban.org/policy-centers/cross-center-initiatives/program-retirement-policy/projects/data-warehouse/what-future-holds/us-population-aging.</u>
- 44 Richard W. Johnson, *What Is the Lifetime Risk of Needing and Receiving Long-Term Services and Supports?* (Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services, April 3, 2019), <u>https://aspe.hhs.gov/reports/what-lifetime-risk-needing-receiving-long-term-services-supports-0</u>.



ABOUT THE ROCKEFELLER INSTITUTE

Created in 1981, the Rockefeller Institute of Government is a public policy think tank that conducts cutting-edge, nonpartisan research and policy analysis. Our mission is to improve the capacities of communities, state and local governments, and the federal system to work toward genuine solutions to the nation's problems. Through rigorous, objective, and accessible analysis and outreach, the Institute gives citizens and governments facts and tools relevant to public decisions.

Learn more at <u>www.rockinst.org</u>.

LEARN MORE www.rockinst.org

@rockefellerinst

