## 2021



Health Care Employment Projections, 2019–2029: An Analysis of Bureau of Labor Statistics Projections by Setting and by Occupation



School of Public Health University at Albany, State University of New York

## Health Care Employment Projections, 2019–2029

### An Analysis of Bureau of Labor Statistics Projections by Setting and by Occupation

**August 2021** 



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## PREFACE

In September 2020, the federal Bureau of Labor Statistics (BLS) published its 10-year occupational and industry projections for employment in the United States from 2019 to 2029.<sup>1</sup> The Center for Health Workforce Studies (CHWS) analyzed the BLS data on employment in health care settings and on health care occupations that provided the basis for the BLS report. This report describes trends in health care employment to help health care providers, educators, policymakers, and other stakeholders better understand current and future demand for health care workers.

The report was prepared by the Center for Health Workforce Studies (CHWS) staff, Kristen Stiegler, Robert Martiniano, and Gaetano Forte, with layout design by Leanne Keough.

Established in 1996, CHWS is an academic research center based at the School of Public Health, University at Albany, State University of New York (SUNY). The mission of CHWS is to provide timely, accurate data and conduct policy-relevant research about the health workforce. The research conducted by CHWS supports and promotes health workforce planning and policymaking at local, regional, state, and national levels. Today, CHWS is a national leader in the field of health workforce studies.

The views expressed in this report are those of CHWS and do not necessarily represent positions or policies of the School of Public Health, University at Albany, SUNY.

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# **EXECUTIVE SUMMARY**

## **INTRODUCTION**

Currently, the federal Bureau of Labor Statistics (BLS) annually publishes 10-year occupational and industry projections for employment in the United States. In September 2020, BLS published its projections for 2019 to 2029.<sup>1,2</sup> The Center for Health Workforce Studies (CHWS) analyzed these data to describe current and projected job growth in the health care sector and in health care occupations.

### BACKGROUND

BLS projections are based on a number of factors, including current employment and employment trends; labor force participation by age, gender, and race/ethnicity; population projections; and macroeconomic trends, such as gross domestic product growth, labor productivity, business investments, and the housing market. This report analyzes the BLS findings and presents a summary of health care job growth between 2009 and 2019 and national job growth projections between 2019 and 2029. It also highlights the most significant findings related to health care sector and health occupations.

### **KEY FINDINGS**

It is projected that the employment in the health care sector will add nearly 2.1 million jobs between 2019 and 2029. Within the health care sector, home care and outpatient care centers\* are projected to see more job growth than all other settings, including hospitals. Key findings from this analysis include the following:

## One in 7 jobs in the United States are health care related.

In 2019, there were nearly 23.6 million jobs (14.5% of total employment nationally) either in the health care sector or in health care occupations working outside of the health care sector. Almost 17.5 million of these jobs (nearly 11% of US employment) were in the health care sector, in both health care and non-health related occupations.

## Jobs in the health care sector steadily grew between 2009 and 2019.

Employment in the health care sector grew by about 19% between 2009 and 2019, adding 2.9 million jobs, while employment in all other sectors grew slightly over 13% during the same time period.

## Employment in home health care grew 27% between 2012 and 2019 and is expected to add over 450,000 jobs by 2029.

Between 2012 and 2019, employment in home health care increased by slightly over 27%, adding nearly 329,000 jobs. Furthermore, home health care is projected to experience the greatest job growth across all health care settings, adding 456,000 new jobs between 2019 and 2029. Additionally, jobs in outpatient care centers, including federally qualified health centers (FQHCs), are projected to grow by nearly 29%, or almost 277,000 jobs during the same time period.

Jobs in the health care sector are expected to grow at a higher rate than other employment sectors over the next decade, though at a slower rate than previously.

<sup>\*</sup> Includes independent outpatient clinics, such as diagnostic and treatment centers, federally qualified health centers, and renal dialysis centers.

Employment in the health care sector is expected to grow faster than employment in all other sectors between 2019 and 2029, with projected increases of 12% and nearly 3%, respectively. While projected employment growth in the health care sector has continued to outpace projected employment growth in other employment sectors, this rate of growth is projected to be slower than previous periods.

It is estimated that nearly 19 million health care workers will be needed nationally between 2019 and 2029, and most of them will replace existing workers.

It is projected that 18.7 million health care workers will be needed between 2019 and 2029 to fill new jobs and to replace individuals expected to leave the occupation or retire over the same period. The vast majority (85%) of these workers will replace existing workers.

Between 2019 and 2029, about 222,000 new RN jobs are expected to be added; hospitals are expected to add nearly 75,000 new RN jobs.

Hospitals are projected to add nearly 75,000 new jobs between 2019 and 2029, followed by nursing homes (43,800) and RN jobs outside of the health care sector (33,200). The total new RN jobs projected to be added between 2019 and 2029 is nearly 222,000.

## LIMITATIONS

The BLS makes its projections in terms of jobs and makes no distinction between full-time and part-time jobs. Thus, it can be challenging to translate the number of projected jobs into the number of individuals in a profession needed to fill those jobs, as individuals can hold multiple part-time jobs. In some professions—for example, dental hygienists—it is common to work 2 or more part-time jobs.<sup>3</sup>

Additionally, there may be some degree of misclassification in jobs reported in some health care settings. For example, a hospital that also provides home health care services or outpatient services may report all workers under the hospital setting, thus hospital employment is overcounted while employment in other health care settings is undercounted. Additionally, BLS adds, deletes, and combines occupational categories periodically. For example, historically, home health aides and personal care aides were separate categories. Starting with the 2019–2029 projections, they are now combined. These types of changes can make it difficult to compare 10-year projections over time.

### DISCUSSION

Job growth in the health care sector between 2019 and 2029 is expected to continue to outpace job growth in other employment sectors, though at a slower rate than the last decade. It is projected that by 2029, over half of all jobs in health care will be in ambulatory care settings. However, these projections are based upon data prior to the COVID-19 pandemic. The COVID-19 pandemic has changed how health care services are delivered, both in terms of physical setting and via telehealth, which resulted in a redistribution in the demand for certain types of health care providers. In addition, another contributing dynamic in the uncertainty of the health care workforce is providers leaving the health workforce. Due to a variety of factors, some of which may have be amplified by the pandemic-such as burnout or fear of exposure—or due to retirement, replacing those workers who have left health care will remain an integral part of planning for the future of the health care workforce.

## **CONCLUSIONS**

Many factors contribute to growing demand for health services and for health workers. Changes in the health service delivery system, in health care financing and policy, and in the population's demographics impact job growth in health care, reducing demand in some settings and for some occupations while increasing demand in other settings and for certain occupations. It is also too early to tell what long-term impact the COVID-19 pandemic will have on the need for health care, the configuration of health care, and the need for new or replacement health care workers. Consequently, it is important to routinely monitor current and future demand for health workers.



# **TECHNICAL REPORT**

## BACKGROUND

In September 2020, the federal Bureau of Labor Statistics (BLS) published its 10-year occupational and industry projections for employment in the United States from 2019 to 2029.<sup>1,2</sup> These projections are based on a number of factors, including current employment and employment trends; labor force participation by age, gender, and race/ ethnicity; population projections; and macroeconomic trends, such as gross domestic product growth, labor productivity, business investments, and the housing market. Prior to 2019, BLS published 10-year occupational and industry projections for employment in the United States every 2 years. In 2019, BLS began publishing their projections annually.<sup>4</sup> This report presents an analysis of national job growth projections from 2019 to 2029, summarizing the most significant findings related to health care sector and health occupations employment based on federal BLS data and employment projections.

## **METHODS**

#### **BLS Employment Projections Data**

BLS employment projections are generated through a 6-step process.<sup>5</sup> Each step represents a model estimating different components of the employment projections, including labor force, aggregate economy, industry demand, occupational employment, industry employment and industry output.<sup>5</sup> Additional details of the BLS employment projection methods can be found in the BLS Handbook of Methods.<sup>6</sup> Projections for jobs in health care occupations include counts of newly created jobs and counts of individuals replacing workers who leave the occupation for another profession or who retire. Individuals who switch jobs within a profession, such as a registered nurse changing employment from one hospital to another, are not included in new job counts.

The BLS projections are national in scope and do not include state or regional projections. State employment projections are typically released by BLS about one year after the national projections. The factors that influence demand for health services nationally—such as an aging population, economic conditions, and changes in health care policy and reimbursement—may have similar effects on demand at the regional level, with some geographic variation. Regardless, the BLS projections represent a comprehensive forecast of future jobs across the nation.

BLS industry employment estimates are based on 2 data sources: the Current Employment Survey (CES) and the Current Population Survey (CPS). Both surveys are administered by the US Bureau of Labor Statistics: The CES survey produces detailed industry estimates of nonfarm employment, hours, and earnings of workers on payroll.<sup>7</sup> The CPS is a household-based, nationally representative survey on the labor force, employment, unemployment, and other demographic and labor force characteristics.<sup>8</sup>

#### How the Data Are Used in This Report

This report refers to health care settings based on the North American Industry Classification System (NAICS).<sup>9</sup> Table 1 presents how the health care settings classified under the NAICS are used in this report. The main source of data is the BLS employment projections Table 2.7 released in 2019.<sup>10</sup> Self-employed health care providers are estimated using information from the BLS national employment matrix, industry code TE1100 (self-employed) and included in ambulatory care services settings (see Appendix for a list of the occupations selected).<sup>10</sup> Employment in federal hospitals is estimated using CES data, series CEU9091622001.<sup>11</sup> Because a projection for federal hospital employment is excluded from the data in BLS Table 2.7, federal hospital employment projections are calculated by applying the projected growth rates for all other hospitals.

Table 1 also shows the components of the various categories used in the report to group the data in the figures presented below. For example, Figure 5 presents a high-level view of health sector employment growth from 2009 to 2019 with 3 aggregations of settings, ambulatory care settings, hospitals, and nursing and residential care facilities. Each one of those aggregated settings includes multiple settings as described in Table 1. For the ambulatory care settings category, offices of physicians, offices of dentists, offices of other health practitioners, outpatient care centers, medical and diagnostic laboratories, home health care services, self-employed in health care, and all other ambulatory care services are included. For the hospitals category, general medical and surgical hospitals, psychiatric and substance abuse hospitals, special hospitals, and all federal, state, and local government hospitals are included. For the nursing and residential care facilities, nursing care facilities and community care facilities for the elderly are included, while other residential facilities are excluded.

Similarly, in Figure 7, a closer look at health sector employment growth in ambulatory care settings from 2009 to 2019 is presented. For this figure, each of the components of the aggregated ambulatory care settings is presented separately, including offices of physicians, offices of dentists, offices of other health professionals, home health settings, outpatient care centers, and other ambulatory care settings.

Employment in health care occupations includes jobs within the health care sector, such as registered nurses (RNs) working in hospitals; jobs outside the health care sector, such as RNs working in schools or for insurance companies; and individuals in health occupations who are self-employed, such as occupational therapists and physical therapists contracting with multiple health care providers, or physicians and dentists who own their own practices.<sup>†</sup>

<sup>&</sup>lt;sup>†</sup> Includes 100 occupations identified by CHWS as health care occupations and is included in the Appendix.



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| TABLE 1. NAICS Health Care and Social | l Assistance Classifications <sup>9</sup> |
|---------------------------------------|---|
|---------------------------------------|---|

| NAICS<br>Code | NAICS Title                                      | Setting<br>Code  | Setting Title                                | How Used in This Report   | Data Source   |                            |   |
|---------------|--|--|--|---|---|----------------------------|---|
|               |  | 6211   | Offices of Physicians                        | Reported as part of ambulatory care settings<br>(Figure 5), separately (Figure 7), and as part<br>of offices of health practitioners (Figures 9,<br>10, and 14) | BLS Employment<br>Projections<br>Table 2.7  |                            |   |
|               | Ambulatory<br>Care Services                      | 6212   | Offices of Dentists                          | Reported as part of ambulatory care settings<br>(Figure 5), separately (Figure 7), and as part<br>of offices of health practitioners (Figures 9,<br>10, and 14) | BLS Employment<br>Projections<br>Table 2.7  |                            |   |
|               |  | 6213   | Offices of Other Health<br>Practitioners     | Reported as part of ambulatory care settings<br>(Figure 5), separately (Figure 7), and as part<br>of offices of health practitioners (Figures 9,<br>10, and 14) | BLS Employment<br>Projections<br>Table 2.7  |                            |   |
| 621           |  | 6214   | Outpatient Care Centers                      | Reported as part of ambulatory care set-<br>tings (Figure 5) and separately (Figures 7, 9,<br>10, and 14)   | BLS Employment<br>Projections<br>Table 2.7  |                            |   |
|               |  | 6215   | Medical and Diagnostic<br>Laboratories       | Reported as part of ambulatory care settings<br>(Figure 5) and as part of other ambulatory<br>care settings (Figures 7, 9, 10, and 14)                          | BLS Employment<br>Projections<br>Table 2.7  |                            |   |
|               |  | 6216   | Home Health Care Services                    | Reported as part of ambulatory care settings<br>(Figure 5) and separately as home health<br>settings (Figures 7, 9 ,10, and 14)                                 | BLS Employment<br>Projections<br>Table 2.7  |                            |   |
|               |  | 6219   | All Other Ambulatory Care<br>Services        | Reported as part of ambulatory care settings<br>(Figure 5) and as part of other ambulatory<br>care settings (Figures 7, 9 ,10, and 14)                          | BLS Employment<br>Projections<br>Table 2.7  |                            |   |
|               | Hospitals  | 6221 General Medical and Surgical<br>Hospitals                                       |  | Reported as part of hospitals   | BLS Employment<br>Projections<br>Table 2.7 and<br>Series<br>CEU9091622001                           |                            |   |
| 622           |  | 6222   | Psychiatric and Substance<br>Abuse Hospitals | Reported as part of hospitals   | BLS Employment<br>Projections<br>Table 2. 7 and<br>Series<br>CEU9091622001                          |                            |   |
|               |  | 6223   | Special Hospitals                            | Reported as part of hospitals   | BLS Employment<br>Projections<br>Table 2. 7 and<br>Series<br>CEU9091622001                          |                            |   |
|               |  | 6231   | Nursing Care Facilities                      | Reported as part of nursing and residential care facilities   | BLS Employment<br>Projections<br>Table 2.7  |                            |   |
| 623           | Nursing and<br>Residential<br>Care<br>Facilities | Nursing and<br>Residential   | Nursing and<br>Residential 6232              | 6232  | Residential Mental Retar-<br>dation, Mental Health, and<br>Substance Abuse Facilities               | Not included in this repor | t |
| 025           |  | Facilities      6233      Community Care Facilities        for the Elderly      6233 |  | Reported as part of nursing and residential care facilities   | BLS Employment<br>Projections<br>Table 2.7  |                            |   |
|               |  | 6239   | Other Residential Care<br>Facilities         | Not included in this repor  | t   |                            |   |
| N/A           | Self-Employed                                    | (in health   | care)  | Reported as part of ambulatory care settings<br>(Figure 5) and as part of other ambulatory<br>care settings (Figures 7, 9 ,10, and 14)                          | BLS Employment<br>Projections<br>Table 1.9<br>selected health<br>care occupations<br>(see Appendix) |                            |   |

N/A indicates not applicable.

#### **Recent Trends in Health Care Employment**

The foregoing decade (2009-2019) of health care employment growth offers context for the 2019-2029 projections. There are 2 lenses through which to look at the health workforce (Figure 1). The first lens includes people who work in the health care sector, for example, all the individuals who work in hospitals. This includes many individuals who are not health care professionals nor in health occupations, such as medical billers, housekeepers, security staff, and information technology staff. The second lens includes the many health care professionals who work outside the health care sector, such as nurses who work in schools or physicians who work in insurance companies.

In 2019, when considered together the 2 lenses totaled 23.6 million jobs, about 1 in 7 jobs in the United States (Table 2). Almost 17.5 million of these jobs (nearly 11% of US employment) were in the health care sector, in both health care and non-health related occupations (Table 2). The remaining 6.1 million jobs in 2019 were in health care occupations working outside of the health care sector (Figure 1, Table 2).





#### TABLE 2. The US Health Care Workforce, 2019<sup>10-12</sup>

| Setting  | Jobs<br>(in thousands) | Percent of Total<br>US Employment |
|--|------------------------|-----------------------------------|
| Health Care Occupations Jobs in Health Care Settings | 13,108.5               | 8.1%                              |
| Other Jobs in Health Care Settings                   | 4,345.5                | 2.7%                              |
| Health Care Occupations Jobs in Other Settings       | 6,133.0                | 3.8%                              |
| Total  | 23,587.0               | 14.5%                             |

Employment in the health care sector grew by 2.6 million jobs between 2009 and 2019 (Figure 2). Health care employment growth outpaced other sectors' growth during that time period, experiencing 19% growth compared to the 13% growth in all other employment sectors (Figure 3).



FIGURE 2. The Number of Health Sector Jobs, 2009 – 2019 (in thousands)<sup>13-15</sup>



FIGURE 3. Job Growth in the Health Care Sector **Compared With All Other Employment Sectors** in the US, 2009-2019<sup>10-12</sup>



At the outset of the 2009-2019 time period, over 4 million jobs were expected to be added in the US over 10 years. By the end of the decade, job growth expectations had slowed to just over 2 million jobs. (Figure 4).

#### Figure 4. Anticipated 10-Year Growth in US Health Care Sector Employment Over Time<sup>10-12,16-20</sup>



<sup>a</sup> Martiniano et al, 2012.<sup>16</sup>; <sup>b</sup> Martiniano et al, 2014.<sup>18</sup>; <sup>c</sup> Marti-niano et al, 2016.<sup>19</sup>; <sup>d</sup> Martiniano et al, 2018.<sup>20</sup>; <sup>e</sup> Martiniano

et al, 2019.<sup>17</sup>; <sup>f</sup> Data adapted from US Bureau of Labor Statistics, Table 1.9.<sup>12</sup>; <sup>g</sup> Data adapted from US Bureau of Labor Statistics, Table 2.7.10, h Data adapted from US Bureau of Labor Statistics, Employment, Hours, and Earnings.<sup>11</sup>

For certain health care settings, employment grew significantly between 2009 and 2019 (Figure 5). Over 1.5 million jobs were added in home health care by 2019 (Figure 6). Moreover, ambulatory care settings experienced growth as well-for example, outpatient care centers grew by nearly 60% and offices of other health practitioners had grown nearly 50% by 2019 (Figure 7).

#### FIGURE 5. Employment Growth in Selected Settings Within the Health Care Sector, 2009-201910-12







#### FIGURE 6. Home Health Care Employment in the US, 2012 - 2019<sup>10-12,17-20</sup>

<sup>a</sup> Martiniano et al, 2014.<sup>18</sup>; <sup>b</sup> Martiniano et al, 2016.<sup>19</sup>; <sup>c</sup> Martiniano et al, 2018.<sup>20</sup>; <sup>d</sup> Martiniano et al, 2019.<sup>17</sup>; <sup>e</sup> Data adapted from US Bureau of Labor Statistics, Table 2.7<sup>10</sup>, <sup>f</sup> Data adapted from US Bureau of Labor Statistics, Table 1.9<sup>12</sup>; <sup>g</sup> Data adapted from US Bureau of Labor Statistics, Employment, Hours, and Earnings.<sup>11</sup>



#### FIGURE 7. Job Growth in Ambulatory Care Settings in the US, 2009–2019<sup>10</sup>

A brief consideration of 2009-2019's employment growth provides important context for the 2019 to 2029 projections. The remainder of this report will examine the 2019 to 2029 projections.

## **FINDINGS**

#### Health Care Sector Employment

Jobs in the health care sector are expected to grow at a higher rate over the next decade than other employment sectors, though at a slower rate than previously.

Between 2019 and 2029, employment in the health care sector is expected to grow faster than employment in all other sectors, with projected increases of 12% and nearly 3%, respectively (Figure 8). For comparison, the growth rate in health care between 2009 and 2019 was over 19% (Figure 3).

## Employment in Selected Health Care Settings

Between 2019 and 2029, jobs in the health care sector are projected to grow fastest in

home health care, followed by outpatient care centers.

FIGURE 8. Projected Employment Growth in the Health Care Sector Compared With All Other Employment Sectors in the US, 2019-2029<sup>10-12</sup>



Home health care is projected to experience the greatest job growth (30%) across all health care settings, adding 456,000 new jobs between 2019 and 2029 (Figure 9).



FIGURE 9. Employment Growth in Selected Settings Within the Health Care Sector, Projected 2019–2029<sup>10-12</sup>

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Additionally, jobs in outpatient care centers, including federally qualified health centers (FQHCs), are projected to grow by nearly 29%, adding almost 277,000 jobs during the same time period. Jobs in hospitals are projected to grow by less than 6% between 2019 and 2029, adding over 386,000 jobs. Within the health care setting of offices of health practitioners, jobs in offices of other health practitioners (ie, chiropractors, podiatrists, social workers, etc.) are projected to grow by more than 25% between 2019 and 2029, adding 239,000 jobs. Jobs in offices of physicians are projected to grow by almost 12%, adding nearly 307,000 jobs during the same time period.

Employment in hospitals is projected to decline as a percentage of total health care employment.

As noted above, hospitals are projected to grow the slowest of all health care sectors between 2019 to 2029 (Figure 9). As a result of the slower growth in hospitals, employment in hospitals is projected to decline from 39% to 37% of total health employment between 2019 and 2029 (Figure 10). At the same time, employment settings that are classified under ambulatory care, such as office of practitioners, home health care, outpatient care centers, and other ambulatory care settings, will become a larger proportion of total health care employment by representing nearly one-half of total health care employment by 2029.



FIGURE 10. Percentage of Total Health Care Employment by Health Care Setting, Projected 2029<sup>10-12</sup>

#### Employment in Selected Health Care Occupations

It is estimated that nearly 19 million health care workers will be needed nationally between 2019 and 2029, though most of them are for replacing existing workers.

It is projected that 18.7 million health care workers will be needed between 2019 and 2029 to fill new jobs and to replace individuals expected to leave an occupation or retire over the same period. Between 2019 and 2029, nearly 570,000 home care and personal care aides,176,000 RNs, and 174,000 nursing assistants will be needed annually to fill new and vacant positions (Figure 11). The vast majority of these new workers (85%) are expected to replace existing workers; nearly 453,000 of these replacement workers will be home health and personal care aides. Over 24,000 nurse practitioners and more than 11,000 physician assistants will be needed annually between 2019 and 2029.

More than 24,000 nurse practitioners (NPs) and 11,400 physician assistants will be needed annually between 2019 and 2029 to fill new positions and replace existing workers who leave the field (Figure 12). Additionally, 6,700 primary care physicians<sup>‡</sup> will be needed annually to fill new positions and positions vacated by individuals expected to leave the occupation or retire. With the exception of psychiatrists, almost all of the projected jobs for physicians will be to replace existing workers. Moreover, of the total 24,000 nurse practitioners that will need to be hired, over 13,000 will be to replace NPs who leave the field.

<sup>&</sup>lt;sup>‡</sup> Primary care physicians include family and general practitioners, general internists, general pediatricians, and obstetricians/gynecologists.





<sup>a</sup> Excludes physicians, nurse practitioners, and physician assistants.

<sup>b</sup> Occupational separations include labor force exits and transfer out of the occupation. It does not include transfers within the occupation. FIGURE 12. Projected Annual Need for Selected Physicians, Nurse Practitioners, Physician Assistants, General Dentists, and Nurse Anesthetists, 2019– 2029<sup>21</sup>



<sup>a</sup> Occupational separations include labor force exits and transfer out of the occupation. It does not include transfers within the occupation.

Between 2019 and 2029, 6 of the top 10 occupations nationally with the highest growth rate will be in health care.

Nurse practitioners (52%), occupational therapy assistants (35%), home health and personal care aides (34%), physician therapy assistants (33%), medical and health services managers (32%), and physician assistants (31%) are projected to have

TABLE 3. Top 10 Fastest Growing Occupations,Projected 2019-202922

| Occupation                                | Percentage<br>Increase |  |  |  |
|---|------------------------|--|--|--|
| Wind turbine service technicians          | 60.7%                  |  |  |  |
| Nurse practitioners                       | 52.4%                  |  |  |  |
| Solar photovoltaic installers             | 50.5%                  |  |  |  |
| Occupational therapy assistants           | 34.6%                  |  |  |  |
| Statisticians                             | 34.6%                  |  |  |  |
| Home health and personal care aides       | 33.7%                  |  |  |  |
| Physical therapy assistants               | 32.6%                  |  |  |  |
| Medical and health services man-<br>agers | 31.5%                  |  |  |  |
| Physician assistants                      | 31.3%                  |  |  |  |
| Information security analysts             | 31.2%                  |  |  |  |

the fastest growth among health care occupations between 2019 and 2029 (Table 3).

## Of the 10 occupations projected to add the largest number of jobs between 2019 and 2029, 4 are in health care.

Home health and personal care aides is the largest-growing health care occupations in the US, followed by registered nurses (RNs) (222,000) (Table 4). Jobs for home care and personal care aides are projected to grow by nearly 1.2 million jobs between 2019 and 2029, a projected increase of nearly 34%.

## In projections of RN jobs between 2019 and 2029, it is estimated that hospitals will add nearly 75,000 new RN jobs.

Hospitals are projected to add nearly 75,000 new jobs between 2019 and 2029, followed by nursing homes (43,800) and RN jobs outside of the health care sector (33,200) (Figure 13). Home health care and RN jobs in offices of physicians are also projected to grow during this time period by adding 29,900 and 29,100 new jobs respectively. In total, nearly 222,000 RN jobs are projected to be added by 2029 (Table 4).

## TABLE 4. Top 10 Occupations with the Most JobGrowth by Number and Percentage, Projected2019 - 202923

| Occupation  | Number<br>Increase | %<br>Increase |  |  |
|---|--------------------|---------------|--|--|
| Home health and<br>personal care aides                                  | 1,159,500          | 33.7%         |  |  |
| Fast food and counter workers   | 460,900            | 11.4%         |  |  |
| Cooks, restaurants  | 327,300            | 23.1%         |  |  |
| Software developers and software quality assurance analysts and testers | 316,000            | 21.5%         |  |  |
| <b>Registered nurses</b>  | 221,900            | 7.2%          |  |  |
| General and operations managers   | 143,800            | 5.8%          |  |  |
| Medical assistants  | 139,200            | 19.2%         |  |  |
| Medical and health<br>services managers                                 | 133,200            | 31.5%         |  |  |
| Market research analysts and marketing specialists                      | 130,300            | 17.7%         |  |  |
| Manual laborers and freight, stock, and material movers                 | 125,700            | 4.2%          |  |  |

## **LIMITATIONS**

The BLS calculates its projections in terms of jobs and makes no distinction between full-time and part-time jobs. Thus, it can be challenging to translate the number of projected jobs into the number of individuals in a profession needed to fill those jobs as individuals can hold multiple part-time jobs. In some professions—for example, dental hygienists—it is common to work 2 or more part-time jobs.<sup>3</sup>

Additionally, there may be some degree of misclassification in jobs reported in some health care settings. For example, a hospital that also provides home health care services or outpatient services may report all workers under the hospital setting, thus hospital employment is overcounted while employment in other health care settings is undercounted. Additionally, BLS adds, deletes, and combines occupational categories which means occupational categories can vary year to year. For example, historically, home health aides and personal care aides were

#### FIGURE 13. Projected Registered Nurse Job Growth by 2029, by Setting<sup>24</sup>



<sup>a</sup> Excludes RNs working in federal hospitals.

separate categories. Starting with the 2019–2029 projections, they were combined. These types of changes can make it difficult to compare changes over time.

### DISCUSSION

Job growth in the health care sector between 2019 and 2029 is expected to continue to outpace job growth in other employment sectors, though at a slower rate compared to the last decade. Previously, between 2009 and 2019, employment in the health care sector had grown about 19% and added 2.4 million jobs. Further, 2019 and 2029 employment growth in health care is expected to slow to around 12%, which still outpaces employment growth in other sectors projected at 3% growth. Likewise, employment in ambulatory care settings, such as offices of physicians, outpatient care centers, including FQHCs, and especially home health care has steadily increased between 2009 and 2019 and outpaced growth in other health care settings. It is estimated that by 2029, over half of all jobs in health care will be in ambulatory care settings.

It should be noted that these projections are based upon data prior to the COVID-19 pandemic. Social distancing and other COVID-19 restrictions disrupted the demand for health care in early 2020.<sup>25</sup> When non-emergency and elective procedures were restricted and small health care practices temporarily closed, health care organizations were forced to lay-off or furlough both health care and non-health care staff to account for the reduction in demand.<sup>25,26</sup> The COVID-19 pandemic also changed how health care services were delivered. To reduce potential COVID-19 exposure to both providers and patients, many outpatient health care organizations restricted visits to wellness visits and used telemedicine as much as possible to deliver necessary services.<sup>27,28</sup> Additionally, many hospitals postponed or eliminated elective or non-emergency procedures during the early stages of the pandemic.<sup>29</sup> BLS reported a 2.4% drop in health care employment in 2020, yet the full impact to the health care workforce or the delivery of health care services from the resurgence of the virus in the fall of 2020 and winter months of 2021 is still being analyzed.<sup>13-15</sup>

Similarly, the projections for health care employment may also be impacted by COVID-19. Burnout out and trauma caused by the pandemic is causing health care providers to leave the field or close their practices.<sup>30</sup> However, because of the pandemic, some areas in health care may experience growth. For example, due to the high number of COVID-19 cases, many patients are avoiding long-term care facilities and nursing homes and opting for home health care instead to reduce their risk of exposure. Patients avoiding nursing homes is shifting demand to home health care workers and services.<sup>31,32</sup> BLS estimated the pandemic's impact on projections and suggested that there would be minimal net impact on health care employment projections from the pandemic.<sup>31</sup>

Ultimately, the extent to which the COVID-19 pandemic and whether the resulting economic downturn will have lasting effects on health care sector employment projections is uncertain. The demand for and configuration of health care may be transformed as changes in health care and policy, such as renewed interest in and expansion of the Affordable Care Act (ACA); continued movement toward value-based care; changing demographics, especially the impact of COVID-19 on the elderly; and the increased use of telemedicine. The transformation may impact the type of providers needed in the future and where they work. Additionally, it is unclear how the toll of providing care during the COVID-19 pandemic will impact the existing health care workforce.

Moreover, it is unclear whether the COVID-19 pandemic will encourage or deter those considering health care as a career, since some may want to join health care to assist, while others may delay entrance into the health care workforce due to fear of exposure.<sup>29,30</sup> Finally, the educational pipeline for the health care workforce faces challenges due to the increased use of online education, but the requirements for in-person clinical experiences remain during a time of continued social distancing and reduced availability of training opportunities.<sup>31</sup>

## CONCLUSIONS

Many factors contribute to growing demand for health services and for health workers. Changes in the health service delivery system, in health care financing and policy, and in the population's demographics could potentially impact job growth in health care, reducing demand in some settings and for some occupations while increasing demand in other settings and for certain occupations. While immediately disruptive, it is too early to tell how the COVID-19 pandemic will impact on the need for health care, the configuration of health care, or the need for new or replacement health care workers. Consequently, it is important to routinely monitor current and future demand for health workers.





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# APPENDIX

#### TABLE A-1. Health Care Occupational Separations and Openings, Projected 2019-29, Numbers (in thousands)<sup>a</sup>

| 2019 National Employment Matrix title and code  |                    | Employment    |                | Employment<br>change, 2019-2029 |             | Occupati                | onal separation<br>annual averag | Occupational     |                        |
|---|--------------------|---------------|----------------|---------------------------------|-------------|-------------------------|----------------------------------|------------------|------------------------|
|   |                    | 2019          | 2029           | Number                          | Percent     | Labor<br>Force<br>Exits | Occupational<br>Transfers        | Total            | 2029 annual<br>average |
| Home health and personal care aides   | 31-1120            | 3439.7        | 4599.2         | 1159.5                          | 33.7        | 247.9                   | 204.9                            | 452.8            | 568.8                  |
| Registered nurses   | 29-1141            | 3096.7        | 3318.7         | 221.9                           | 7.2         | 87                      | 66.8                             | 153.7            | 175.9                  |
| Medical assistants  | 31-9092            | 725.2         | 864.4          | 139.2                           | 19.2        | 30.4                    | 48.5                             | 78.9             | 92.8                   |
| Medical and health services managers  | 11-9111            | 422.3         | 555.5          | 133.2                           | 31.5        | 12.2                    | 21.4                             | 33.7             | 47                     |
| Nursing assistants  | 31-1131            | 1528.5        | 1645.5         | 116.9                           | 7.6         | 85.1                    | 7.6                              | 162.3            | 1/4                    |
| Substance abuse, behavioral disorder, and mental health counselors  | 21-1018            | 319.4         | 398.4          | 79                              | 24 7        | 11 7                    | 19.8                             | 31.5             | 39.4                   |
| Licensed practical and licensed vocational nurses   | 29-2061            | 721.7         | 787.4          | 65.7                            | 9.1         | 24.6                    | 27.3                             | 51.8             | 58.4                   |
| Physical therapists   | 29-1123            | 258.2         | 305.2          | 47                              | 18.2        | 5.3                     | 5.2                              | 10.5             | 15.2                   |
| Speech-language pathologists  | 29-1127            | 162.6         | 203.1          | 40.5                            | 24.9        | 4                       | 5.6                              | 9.6              | 13.7                   |
| Physician assistants  | 29-1071            | 125.5         | 164.8          | 39.3                            | 31.3        | 2.2                     | 5.3                              | 7.5              | 11.4                   |
| Massage therapists  | 31-9011            | 166.7         | 201.1          | 34.4                            | 20.6        | 10.6                    | 8                                | 18.6             | 22                     |
| Physical therapist assistants   | 31-2021            | 98.7          | 130.9          | 32.2                            | 32.6        | 4.5                     | 7.4                              | 11.9             | 15.1                   |
| specialists, and health technologists and   | 20,2000            | 244.0         | 270.0          | 20                              | 0.5         | 10.0                    | 447                              | 24.0             | 07.0                   |
| Healthcare social workers   | 29-2098            | 341.0         | 370.6          | 29                              | 0.5<br>14.4 | 10.2                    | 14.7                             | 24.9             | 27.8                   |
| Respiratory therapists  | 29-1126            | 135.8         | 162            | 26.3                            | 19.4        | 3.5                     | 3                                | 6.5              | 9.2                    |
| Clinical laboratory technologists and technicians   | 29-2010            | 337.8         | 362.5          | 24.7                            | 7.3         | 9.1                     | 10.1                             | 19.1             | 21.6                   |
| Dental assistants   | 31-9091            | 354.6         | 378            | 23.4                            | 6.6         | 15.8                    | 20.9                             | 36.7             | 39                     |
| Phlebotomists   | 31-9097            | 132.6         | 155.5          | 22.8                            | 17.2        | 5.4                     | 8.2                              | 13.5             | 15.8                   |
| Occupational therapists   | 29-1122            | 143.3         | 166            | 22.7                            | 15.9        | 3.5                     | 4.5                              | 8                | 10.3                   |
| Mental health and substance abuse social<br>workers   | 21-1023            | 123.2         | 143.8          | 20.7                            | 16.8        | 3.8                     | 7.6                              | 11.4             | 13.4                   |
| Physicians, all other; and  |                    |               |                |                                 |             |                         |                                  |                  |                        |
| ophthalmologists, except pediatric<br>Veterinary technologists and technicians  | 29-1228<br>29-2056 | 429.5         | 447.9<br>131.2 | 18.5<br>18.3                    | 4.3         | 7.1                     | 4.7<br>5.6                       | <u>11.8</u><br>9 | 13.6<br>10.9           |
| Emergency medical technicians and   |                    | 005.0         |                | 47                              |             |                         |                                  |                  | 17.4                   |
| paramedics  | 29-2041            | 265.2         | 282.2          | 17                              | 6.4         | 4.6                     | 11.1                             | 15.7             | 17.4                   |
| Veterinary assistants and laboratory  | 31-2011            | 47.1          | 03.5           | 10.3                            | 34.0        | 2.5                     | 2.9                              | 5.5              | 0.9                    |
| animal caretakers   | 31-9096            | 99.5          | 115.2          | 15.7                            | 15.8        | 5.2                     | 10.1                             | 15.3             | 16.9                   |
| Pharmacy technicians  | 29-2052            | 422.3         | 437.6          | 15.2                            | 3.6         | 12.2                    | 19.6                             | 31.8             | 33.4                   |
| Marriage and family therapists  | 21-1013            | 66.2          | 80.9           | 14.8                            | 22.3        | 2.4                     | 4.1                              | 6.4              | 7.9                    |
| Veterinarians   | 29-1131            | 89.2          | 103.4          | 14.2                            | 15.9        | 1.6                     | 1.4                              | 3                | 4.5                    |
| Radiologic technologists and technicians  | 29-2034            | 212           | 226.1          | 14.1                            | 6.7         | 5.2                     | 5.3                              | 10.6             | 12                     |
| Diagnostic medical sonographers   | 29-2032            | 74.3          | 239.7          | 12.5                            | 16.8        | 1.9                     | 4.9                              | 3.9              | 5.1                    |
| Rehabilitation counselors   | 21-1015            | 120.2         | 132.5          | 12.3                            | 10.3        | 4.1                     | 7                                | 11.1             | 12.3                   |
| Psychiatric technicians   | 29-2053            | 82.8          | 93.8           | 11                              | 13.3        | 2.5                     | 4                                | 6.5              | 7.6                    |
| Physical therapist aides  | 31-2022            | 50.6          | 61.3           | 10.8                            | 21.3        | 2.2                     | 3.6                              | 5.8              | 6.9                    |
| Community health workers  | 21-1094            | 64.9          | 74.8           | 9.9                             | 15.2        | 2.4                     | 4.2                              | 6.6              | 7.6                    |
| Ophthalmic medical technicians  | 29-2057            | 09.0<br>129.2 | 146.7          | 0.0                             | 6.1         | 1.8                     | 2.9                              | 4.7              | 5.0                    |
| Surgical technologists  | 29-2055            | 111.3         | 118.9          | 7.6                             | 6.8         | 3.3                     | 5.3                              | 8.5              | 9.3                    |
| Family medicine physicians  | 29-1215            | 119.3         | 126.6          | 7.3                             | 6.1         | 2                       | 1.3                              | 3.3              | 4                      |
| Environmental scientists and specialists,   |                    |               |                |                                 |             |                         |                                  |                  |                        |
| including health  | 19-2041            | 90.9          | 98             | 7.1                             | 7.8         | 1.5                     | 6.6                              | 8.2              | 8.9                    |
| Healthcare support workers, all other   | 31-9099            | 96.9          | 103.6          | 6.7                             | 6.9         | 5.3                     | 5.3                              | 10.6             | 11.3                   |
| Psychiatric aldes   | 29-1151            | 09.0<br>44.9  | 51             | 6.2                             | 10.9        | 3.4                     | 3.1<br>1.4                       | 2.3              | 2.9                    |
| Dietitians and nutritionists  | 29-1031            | 74.2          | 80.1           | 5.9                             | 8           | 2.6                     | 2.1                              | 4.7              | 5.3                    |
| Clinical, counseling, and school  | 19-3031            | 171 5         | 176 7          | 53                              | 31          | 38                      | 6.2                              | 10               | 10.5                   |
| Athletic trainers   | 29-9091            | 32.1          | 37.3           | 5.2                             | 16.2        | 0.7                     | 1                                | 1.7              | 2.2                    |
| Therapists, all other   | 29-1129            | 32.6          | 37.4           | 4.8                             | 14.6        | 0.9                     | 1                                | 1.9              | 2.4                    |
| Health information technologists, medical registrars, surgical assistants, and healthcare practitioners and technical |                    |               |                |                                 |             |                         |                                  |                  |                        |
| workers, all other  | 29-9098            | 59.4          | 64.1           | 4.7                             | 7.9         | 1.3                     | 1.8                              | 3.1              | 3.5                    |
| Occupational health and safety specialists  | 19-5011            | 100.5         | 104.3          | 3.8                             | 3.8         | 2.1                     | 3                                | 5.1              | 5.5                    |
| Counselors, all other   | 21-1019            | 29.1          | 32.9           | 3.8                             | 13          | 1                       | 1.7                              | 2.7              | 3.1                    |
| Dentists, general<br>Life, physical, and social science   | 29-1021            | 132.1         | 135.7          | 3.7                             | 2.8         | 2.7                     | 1.1                              | 3.8              | 4.2                    |
| technicians, all other  | 19-4099            | 71            | 74.3           | 3.4                             | 4.7         | 2.1                     | 5.9                              | 8                | 8.3                    |
| Medical equipment preparers   | 31-9093            | 58.7          | 62.2           | 3.4                             | 5.9         | 3.2                     | 3.2                              | 6.4              | 6.7                    |

| 2019 National Employment Matrix title and code |         | Employment |       | Employment<br>change, 2019-2029 |         | Occupati                | onal separation<br>annual avera | Occupational |                        |
|--|---------|------------|-------|---------------------------------|---------|-------------------------|---------------------------------|--------------|------------------------|
|  |         | 2019       | 2029  | Number                          | Percent | Labor<br>Force<br>Exits | Occupational<br>Transfers       | Total        | 2029 annual<br>average |
| Dental laboratory technicians                  | 51-9081 | 36.2       | 39.6  | 3.4                             | 9.4     | 1.6                     | 2.6                             | 4.2          | 4.6                    |
| Psychiatrists                                  | 29-1223 | 27.9       | 31.3  | 3.3                             | 11.9    | 0.5                     | 0.3                             | 0.8          | 1.1                    |
| Cardiovascular technologists and               |         |            |       |                                 |         |                         |                                 |              |                        |
| technicians                                    | 29-2031 | 57.4       | 60.5  | 3.1                             | 5.4     | 1.4                     | 1.4                             | 2.8          | 3.2                    |
| Opticians, dispensing                          | 29-2081 | 73.8       | 76.8  | 3                               | 4       | 3.1                     | 2.3                             | 5.4          | 5.7                    |
| Environmental science and protection           |         |            |       |                                 |         |                         |                                 |              |                        |
| technicians, including health                  | 19-4042 | 34.7       | 37.6  | 2.9                             | 8.4     | 1                       | 2.9                             | 4            | 4.3                    |
| Medical equipment repairers                    | 49-9062 | 53.9       | 56.7  | 2.8                             | 5.1     | 2.3                     | 2.8                             | 5.1          | 5.4                    |
| Magnetic resonance imaging technologists       | 29-2035 | 38.7       | 41.4  | 2.7                             | 7       | 1                       | 1                               | 1.9          | 2.2                    |
| Orderlies                                      | 31-1132 | 50.6       | 53.1  | 2.5                             | 5       | 2.8                     | 2.5                             | 5.3          | 5.6                    |
| Forensic science technicians                   | 19-4092 | 17.2       | 19.6  | 2.4                             | 14.1    | 0.5                     | 1.5                             | 2            | 2.3                    |
| Chiropractors                                  | 29-1011 | 51.1       | 53.4  | 2.3                             | 4.5     | 0.7                     | 0.4                             | 1.2          | 1.4                    |
| Ophthalmic laboratory technicians              | 51-9083 | 30.2       | 32.5  | 2.3                             | 7.6     | 1.3                     | 2.2                             | 3.5          | 3.7                    |
| Exercise physiologists                         | 29-1128 | 19.8       | 22.1  | 2.2                             | 11.3    | 0.6                     | 0.6                             | 1.2          | 1.4                    |
| Optometrists                                   | 29-1041 | 44.4       | 46.3  | 1.9                             | 4.3     | 0.9                     | 0.5                             | 1.3          | 1.5                    |
| Audiologists                                   | 29-1181 | 13.8       | 15.6  | 1.8                             | 13.3    | 0.3                     | 0.3                             | 0.7          | 0.8                    |
| Dietetic technicians                           | 29-2051 | 30.2       | 32    | 1.8                             | 5.9     | 0.9                     | 1.4                             | 2.3          | 2.5                    |
| Recreational therapists                        | 29-1125 | 19.9       | 21.6  | 1.7                             | 8.3     | 0.5                     | 0.5                             | 1            | 1.2                    |
| Orthotists and prosthetists                    | 29-2091 | 10         | 11.7  | 1.7                             | 16.9    | 0.3                     | 0.4                             | 0.7          | 0.9                    |
| Medical appliance technicians                  | 51-9082 | 14.8       | 16.5  | 1.7                             | 11.5    | 0.7                     | 1.1                             | 1.8          | 1.9                    |
| Occupational therapy aides                     | 31-2012 | 8          | 9.5   | 1.6                             | 19.9    | 0.4                     | 0.5                             | 0.8          | 1                      |
| Radiation therapists                           | 29-1124 | 18.5       | 19.9  | 1.3                             | 7.1     | 0.4                     | 0.5                             | 0.9          | 1                      |
| Occupational health and safety technicians     | 19-5012 | 22.1       | 23.1  | 1                               | 4.8     | 0.5                     | 0.7                             | 1.1          | 1.2                    |
| Nuclear medicine technologists                 | 29-2033 | 18.5       | 19.5  | 1                               | 5.4     | 0.5                     | 0.5                             | 0.9          | 1                      |
| Hearing aid specialists                        | 29-2092 | 8.1        | 9     | 0.9                             | 10.5    | 0.2                     | 0.3                             | 0.5          | 0.6                    |
| Nurse midwives                                 | 29-1161 | 7.2        | 8.1   | 0.8                             | 11.6    | 0.2                     | 0.2                             | 0.4          | 0.5                    |
| Genetic counselors                             | 29-9092 | 2.6        | 3.2   | 0.6                             | 21.5    | 0.1                     | 0.1                             | 0.1          | 0.2                    |
| Epidemiologists                                | 19-1041 | 8          | 8.3   | 0.4                             | 4.6     | 0.1                     | 0.5                             | 0.6          | 0.6                    |
| Psychologists, all other                       | 19-3039 | 19.8       | 20.2  | 0.4                             | 2.3     | 0.4                     | 0.7                             | 1.1          | 1.2                    |
| Orthodontists                                  | 29-1023 | 7.2        | 7.3   | 0.2                             | 2.4     | 0.1                     | 0.1                             | 0.2          | 0.2                    |
| Anesthesiologists                              | 29-1211 | 33.8       | 34    | 0.2                             | 0.5     | 0.5                     | 0.4                             | 0.9          | 0.9                    |
| Drai and maximolacial surgeons                 | 29-1022 | 0.0        | 0.0   | 0.1                             | 2.4     | 0.1                     | 0                               | 0.2          | 0.2                    |
| Prostnodontists                                | 29-1024 | 0.6        | 0.6   | 0                               | 2.2     | 0 1                     | 0                               | 0 3          | 0.2                    |
| Pediatrists, all other specialists             | 29-1029 | 10.5       | 10.6  | 0                               | 0.2     | 0.1                     | 03                              | 0.2          | 0.2                    |
| A supure turists and bealthears diagnosing     | 29-1001 | 10.5       | 10.0  | 0                               | 0.2     | 0.2                     | 0.3                             | 0.5          | 0.5                    |
| or treating practitioners, all other           | 20-1208 | 10.6       | 10 /  | -0.1                            | -03     | 16                      | 0.7                             | 23           | 23                     |
| General internal medicine physicians           | 29-1230 | 49.0       | 49.4  | -0.1                            | -0.5    | 0.8                     | 0.7                             | 2.3          | 2.3                    |
| Obstetricians and gynecologists                | 29-1218 | 20.3       | 20.1  | -0.3                            | -0.0    | 0.0                     | 0.3                             | 0.5          | 0.5                    |
| Pediatricians general                          | 29-1221 | 32.5       | 32    | -0.5                            | -1.6    | 0.5                     | 0.2                             | 0.9          | 0.5                    |
| Surgeons, except ophthalmologists              | 29-1248 | 39.6       | 38.8  | -0.9                            | -2.2    | 0.6                     | 0.0                             | 1 1          | 1                      |
| Medical transcriptionists                      | 31-9094 | 58.5       | 57.2  | -1.3                            | -2.2    | 3.2                     | 3.8                             | 7            | 6.9                    |
| Pharmacy aides                                 | 31-9095 | 37.9       | 32    | -5.9                            | -15.7   | 1.7                     | 2.2                             | 3.8          | 3.2                    |
| Pharmacists                                    | 29-1051 | 321.7      | 311.2 | -10.5                           | -3.3    | 6.6                     | 5.6                             | 12.2         | 11.2                   |

<sup>a</sup> Data adapted from Table 1.10: Occupational separations and openings, projected 2019-29, Employment Projections program, US Bureau of Labor Statistics.

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Ms. Stiegler specializes in project management, program coordination, and stakeholder management. She coordinates the DSRIP survey process, coordinates and compiles the tracking report, and oversees New York work and research reports.



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