



COVID-19 and the Changing Massachusetts Healthcare Workforce

Citation

Taube, S., and Lipson, R. (September 2021). COVID-19 and the Changing Massachusetts Healthcare Workforce. Published by Harvard Kennedy School and the Massachusetts Healthcare Collaborative.

Published version

<https://www.pw.hks.harvard.edu/post/ma-healthcare-workforce>

Link

<https://nrs.harvard.edu/URN-3:HUL.INSTREPOS:37373385>

Terms of use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Open Access License Articles (IOAL), as set forth at

<https://harvardwiki.atlassian.net/wiki/external/NGY5NDE4ZjgzNTc5NDQzMGIzZWZhMGFIOWI2M2EwYTg>

Accessibility

<https://accessibility.huit.harvard.edu/digital-accessibility-policy>

Share Your Story

The Harvard community has made this article openly available.
Please share how this access benefits you. [Submit a story](#)



COVID-19 AND THE CHANGING MASSACHUSETTS HEALTHCARE WORKFORCE

Trends, challenges, and opportunities

About the Authors

[Stephanie Taube](#) is a Research Fellow at the Project on Workforce at the Malcolm Wiener Center for Social Policy at the Harvard Kennedy School.

[Rachel Lipson](#) is the Director of the Project on Workforce at the Malcolm Wiener Center for Social Policy at the Harvard Kennedy School.

Acknowledgements

This report would not have been possible without the efforts of the Project on Workforce Summer Fellowship Team – Chida Balaji, Graciela Watrous, and Mary Guay – who provided critical inputs to the brief and findings. Project on Workforce Faculty Co-Chairs Joseph Fuller, David Deming, and Peter Blair and Senior Advisor Robert Schwartz provided valuable advice and guidance. We thank Bledi Taska for providing access to the Burning Glass Technologies data.

The authors also thank the Massachusetts Executive Office of Labor and Workforce Development as well as members of the Massachusetts Healthcare Collaborative for their support on this report. Nancy Snyder, Rebekah Lashman, Marina Zhavoronkova, Jennifer James, and Patricia Yu also provided essential comments and insights.

The views expressed in this paper are the sole responsibility of the authors and not meant to represent the views of the Harvard Kennedy School, Harvard University, the Massachusetts Executive Office of Labor and Workforce Development, or the Massachusetts Healthcare Collaborative.

Please direct inquiries to: [Stephanie Taube](#) (staube@hks.harvard.edu) and Jennifer James (jennifer.james@state.ma.us).

Suggested citation: Taube, S., and Lipson, R. (September 2021). COVID-19 and the Changing Massachusetts Healthcare Workforce. Published by Harvard Kennedy School and the Massachusetts Healthcare Collaborative.

About [The Project on Workforce at Harvard](#)

The Project on Workforce is an interdisciplinary, collaborative project between the Harvard Kennedy School's Malcolm Wiener Center for Social Policy, the Harvard Business School Managing the Future of Work Project, and the Harvard Graduate School of Education. The Project produces and catalyzes basic and applied research at the intersection of education and labor markets for leaders in business, education, and policy. The Project's research aims to help shape a postsecondary system of the future that creates more and better pathways to economic mobility and forges smoother transitions between education and careers. Learn more at www.pw.hks.harvard.edu.

About the Massachusetts Healthcare Collaborative

The Massachusetts Healthcare Collaborative was convened by Governor Baker in 2019 to address critical shortages in the healthcare workforce, namely in direct care, behavioral health, and nursing occupations.

Report design: [Isaiah Baldissera](#)

Executive Summary	3
Introduction	5
Data & Methodology	6
The Healthcare Workforce in Massachusetts and the Onset of COVID-19	7
Occupational Effects of COVID-19 on the Healthcare Workforce	8
Effects of COVID-19 on Nursing Roles	9
Effects of COVID-19 on Direct Care Roles	14
Effects of COVID-19 on Behavioral Health Roles	20
Effects of COVID-19 across Healthcare Roles	23
Response in Policy and Practice	25
Areas for Future Research	27
Conclusion	28
Endnotes	30

Executive Summary

The first wave of the COVID-19 pandemic created unprecedented uncertainties in the Massachusetts healthcare workforce. In this white paper, we revisit the spring and summer of 2020 to identify and evaluate the changes, challenges, and innovations induced by the COVID-19 pandemic to the Massachusetts healthcare labor market. We aim to address three broad questions: 1) What were the most significant changes to labor supply and demand in nursing, behavioral health, and direct care at the onset of the pandemic? 2) What actions and strategies did government agencies, employers, and educators deploy to respond to rapidly changing conditions on the ground? 3) Which of these changes are likely to be temporary and which may have lasting effects?

Throughout the first wave of the pandemic, job postings fluctuated by role and setting as employer and patient needs shifted in an uncertain environment. Initial unemployment claims in healthcare occupations increased dramatically and peaked in April and May of 2020, as demand decreased for elective procedures, out-patient care, and in-home care. Following the initial volatility in the spring, the healthcare labor market stabilized somewhat in the summer months, but unemployment remained persistent. However, the numbers concealed wide variation across roles, care settings, and regions in Massachusetts.

In the nursing workforce in Massachusetts, trends in Unemployment Insurance (UI) claims and job postings varied by region and specialization in 2020. Many ambulatory care nurses were laid off or furloughed, and the shortage of Critical Care Nurses intensified. The first wave of the pandemic interrupted an already-restricted pipeline of new nurses, limiting clinical placements and increasing wait times for licensing exams. Attrition and retirements among Registered Nurses (RNs) accelerated during the spring and summer of 2020, posing long-term workforce challenges, as increasingly tough working conditions deterred an aging RN workforce.

Direct care workers were also on the front lines of

the pandemic. The impact of the first wave on job postings and UI claims varied greatly for different direct care roles. Job postings for Certified Nursing Assistant (CNA) positions remained high, especially in long-term care (LTC) facilities, but were inconsistent for both Home Health Aides (HHAs) and Personal Care Aides (PCAs). The already-limited pipeline of new direct care workers was interrupted during the first wave, as clinical training and licensing exams grew increasingly unavailable.

For behavioral health workers, job postings decreased in April 2020, while new UI claims increased dramatically in April and May. However, both job postings and UI claims approached pre-pandemic levels by August 2020. Consumer request for behavioral health services appeared to increase during the first wave of the pandemic, as the crisis intensified stress on mental and behavioral health issues. The use of telehealth increased in behavioral health, as virtual services were rapidly implemented to reduce in-person exposure.

As these immense and unprecedented challenges in the healthcare workforce emerged during the first wave of the pandemic, Massachusetts piloted new and innovative approaches to educating healthcare trainees, providing patient care, and filling essential roles. To help address recruitment and hiring challenges in long-term care facilities, the Commonwealth of Massachusetts developed its first-ever online job portal dedicated to these roles. As COVID reduced access to on-site classes and clinical placements for healthcare students, training providers across the state have implemented and expanded programs for healthcare students to engage in remote learning.

State and Federal regulators also responded rapidly to support healthcare workers, employers, and consumers. New policies allowed out-of-state nurses, nurses with expired licenses, and nursing students in their final semester of school to enter the nursing workforce in Massachusetts. Several CNA licensing and clinical placement requirements were also relaxed or waived. In addition, after the onset of the pandemic, both Federal and State regulators approved hazard pay for many essential workers.

While the focus of this white paper is on the initial months following the onset of the pandemic, we also propose questions for future research in stu-

dent enrollment in healthcare training programs, updates to CNA curriculum and licensing, transitioning displaced workers into healthcare roles, retirement rates among nurses, shifts in care settings, and the utilization of telehealth.

Introduction

The first wave of the COVID-19 pandemic created unprecedented uncertainties in the Massachusetts healthcare workforce. With influxes of patients, lockdowns, and health risks, workers faced immense new challenges on the job. Simultaneously, healthcare systems and employers had no choice but to shift rapidly in response to changing patient needs and unpredictable resource availability. The adaptations of the workforce ecosystem during this time of intense volatility merits further attention and reflection.

In this white paper, we revisit the spring and summer of 2020 to identify and evaluate the changes, challenges, and innovations induced by the COVID-19 pandemic to the Massachusetts healthcare labor market. We aim to address three broad questions: 1) What were the most significant changes to labor supply and demand in nursing, behavioral health, and direct care at the onset of the pandemic? 2) What actions and strategies did government agencies, employers, and educators deploy to respond to rapidly changing conditions on the ground? 3) Which of these changes are likely to be temporary and which may have lasting effects?

We ask these questions to enhance our understanding of the implications for the future of work in the Massachusetts healthcare sector as well as nationally. In particular, we aim to:

- Understand how healthcare employers, employees and educators adapted and responded during the crisis
- Analyze the ways key occupational roles were affected and how they may change in the future
- Identify new policies and pilot programs with high potential that should be evaluated for effectiveness
- Consider future implications for talent pipelines into priority healthcare roles

Overview

In this white paper, our focus is on the short-term impacts of the first wave of COVID-19 on the healthcare workforce in Massachusetts. Our analysis encompasses the onset of the pandemic through August 2020, with an emphasis on the initial surge of COVID-19 cases during the months of April and May. While the short length of time evaluated limits our abilities to project the longevity of trends, a significant advantage of analyzing a brief period of time is that we are able to more confidently point to the crisis as a source of change.

This brief proceeds in four sections. The introduction includes background on our methodology, objectives, and overview of the healthcare landscape in Massachusetts. Subsequently, we detail the changes induced for three priority healthcare occupations in the state – nursing, direct care, and behavioral health. In the third section of this report, we identify cross-cutting trends that affected the entirety of the healthcare workforce and responsive innovations during the early months of the pandemic. Finally, in the fourth section of the report, we look ahead to identify areas for future research.

Data & Methodology

The data in this white paper are sourced from primary and secondary research conducted by the Project on Workforce at Harvard in collaboration with the Massachusetts Healthcare Collaborative during the summer and fall of 2020. We draw on both quantitative and qualitative methods in our analysis, utilizing a range of data sources.

Quantitative Sources & Methods

We used several data sources in the quantitative analysis, including 2020 unemployment data from the Massachusetts Department of Unemployment Assistance, 2020 job postings data from Burning Glass Technologies, a labor market analytics firm, and pre-COVID workforce data from the federal Bureau of Labor Statistics.

We analyzed Unemployment Insurance (UI) trends by occupation, region, and population demographics. Data includes the total volume of initial claims for permanently separated employees from January through August of 2020. Trends in job postings were analyzed by occupation and region for January through August of 2020. UI and job postings data were compared to determine how many unemployed workers were available for each vacant role.

The availability and specificity of data was limited for both job postings and UI claims. In UI data, some distinct occupations are categorized as one -- for example, Certified Nursing Assistants (CNAs) and non-certified Nursing Assistants are often grouped together, even though CNAs have more clinical training, require licensure, and provide a wider range of patient services. In other cases, job titles may lack meaningful differentiation, such as in some behavioral health positions, creating challenges in the analysis of those roles. Job postings data, collected across many online job portals, may be incomplete or imprecise. Additionally, UI data excludes some claimants, such as those who applied for Pandemic Unemployment Assistance. In an effort to offset some of these limitations and enhance our analysis, we supplemented the dataset

with insights from informational interviews.

Qualitative Sources & Methods

Our qualitative analysis comes from semi-structured interviews with 27 healthcare workforce experts and stakeholders in Massachusetts during the summer of 2020. Interviewees included educators and trainers, employees and representatives of employee associations, employers and staff of employer associations, healthcare consultants, and experts in the public sector. Interviewees were categorized by occupation specialization in nursing, direct care, and/or behavioral health. Guided by an interviewer, respondents shared insights on their experiences and observations during the first COVID surge in the spring of 2020, and also provided their own opinions and predictions on the long-term effects of the pandemic on the workforce.

The Healthcare Workforce in Massachusetts and the Onset of COVID-19

Background: The healthcare sector is vital to the Massachusetts economy.

The healthcare sector in Massachusetts is responsible for the largest share of employment of any sector in the state. In 2018, the industry employed over 721,000 individuals, or approximately 18% of the state's working population.¹ The sector has experienced steady growth in recent years. Between 2008 and 2018, the number of employees in healthcare increased by 15%.²

Healthcare workers in Massachusetts work in a diverse mix of settings. Healthcare professionals and support employees in Massachusetts are more likely than national counterparts to work in hospital settings – in 2016, these workers comprised 40% of the healthcare workforce in the state.³ Another 38% worked in ambulatory care and outpatient settings, including community health clinics, and the remaining 22% work in nursing and residential care settings.⁴ In the years prior to the pandemic, healthcare delivery in the state was shifting from inpatient to outpatient settings, with high growth for jobs in home-based care settings.⁵

A leader in the healthcare sector, Massachusetts also faces persistent talent pipeline challenges.

The Commonwealth of Massachusetts is widely recognized as a global leader in healthcare quality, capacity, and innovation. The state ranks among the best in the country in access to care, health outcomes, and health disparities.⁶ In addition,

many of the world's most highly regarded hospitals and medical research institutions are based in the Greater Boston region.

Even so, Massachusetts has faced shortages in the healthcare workforce for more than a decade.⁷ A number of factors have contributed to the shortage, including challenges in the recruitment and training pipeline, and the acceleration of job creation in the healthcare sector.⁸ In the absence of intervention, it was anticipated that workforce shortages in the state would more than triple between 2017 and 2024, resulting in reduced quality and accessibility of healthcare, and a statewide loss of an estimated \$1 to 2 billion in workforce income annually.⁹

To address these shortages in the healthcare workforce, in 2019, Massachusetts launched the Massachusetts Healthcare Collaborative.¹⁰ Comprised of leadership from industry, government and education, the Collaborative aimed to support a healthcare workforce that faces increasing challenges to training, recruitment, and retention across the Commonwealth. Initially, the group identified high-impact strategies designed to result in a robust talent pipeline for three targeted occupations: direct care, behavioral health and nursing.

Industry Makeup: The healthcare workforce in Massachusetts is diverse and predominantly female.

While healthcare workers are more likely than workers in other sectors to hold advanced degrees, many healthcare workers in Massachusetts work in support occupations.¹¹ In 2019, the distribution of roles in the state featured approximately 109,000 Personal Care Aides (PCAs) and Home Health Aides (HHAs), 81,000 Registered Nurses (RNs), 24,000 behavioral health counselors and social workers, and 25,000 physicians.¹² These numbers reflect the reality that many healthcare roles remain low-wage occupations -- for instance, the median wage in Massachusetts for direct care roles is \$21,000 annually, and over half of direct care workers nationally receive public assistance.¹³

Relative to the state's overall labor market, the healthcare sector's workers are disproportionately female (77%), people of color (30%), and immi-

grants (23%).¹⁴ This is even more pronounced in low-wage roles in direct care. In Massachusetts, 86% of direct care workers are women, 57% are people of color, and 34% are immigrants.¹⁵ In addition to being disproportionately represented in the healthcare workforce, women, people of color, and immigrants were also significantly impacted by the economic and health effects of the pandemic.

COVID-19 placed a significant strain on the infrastructure of the Massachusetts healthcare system.

The onset of COVID-19 in spring 2020 placed profound stresses on the healthcare infrastructure of the state. Between January and August of 2020, nearly 120,000 COVID cases were confirmed in Massachusetts, including more than 8,000 deaths.¹⁶ The state experienced a spike in COVID cases in late April and early May, and by May 1, 2020, Massachusetts had the third highest reported rate of COVID cases in the US, and the fourth highest reported death count.¹⁷ Healthcare leaders in Massachusetts scrambled to plan in the midst of tremendous uncertainty, assessing how to allocate hospital beds and staff, and how to acquire resources like Personal Protective Equipment for potential future surges.

COVID-19 brought unprecedented instability to the healthcare labor market in Massachusetts.

The pandemic induced disruption to healthcare jobs on a scale unparalleled by previous downturns. The healthcare labor market is often considered “recession-proof” and tends to experience stability, even during economic crises.¹⁸ For instance, following the dot-com recession of 2001 as well the Great Recession of 2008-2009, the healthcare industry was a leader in new job creation in Massachusetts.¹⁹ At the onset of the pandemic, job seekers with healthcare credentials were encouraged to pursue opportunities in the healthcare sector. But unlike these prior recessions, the pandemic led to significant layoffs in certain healthcare roles in the initial weeks of the first COVID wave in Massachusetts.

In the spring and summer of 2020, job postings fluctuated by role and setting as employer and patient

needs shifted in an uncertain environment. Initial unemployment claims in healthcare occupations increased dramatically and peaked in April and May 2020, as demand decreased for elective procedures, out-patient care, and in-home care. The unemployment insurance (UI) claims filed varied by both role and demographics. However, the initial claims during the first wave were disproportionately filed by low-wage earners, women, and Hispanic healthcare workers.²⁰

Following the initial volatility in the spring, the healthcare labor market in Massachusetts stabilized somewhat in the summer of 2020, but unemployment remained persistent. The share of unemployment insurance claimants in Massachusetts working in healthcare and social assistance fell from a peak of 13.5% (76,506) in May 2020 to 10.8% (38,814) in January 2021.²¹ However, these numbers conceal wide variation across roles, care settings, and regions in Massachusetts. In the following sections of this brief, we will analyze the effects of the first wave of COVID across the three priority occupational groups of Direct Care, Behavioral Health, and Nursing.

Occupational Effects of COVID-19 on the Healthcare Workforce

In this section, we take a closer look at the effects of the first wave of COVID-19 on the three occupations prioritized by the Massachusetts Healthcare Collaborative. For each occupational field, we describe types of roles, analyze data on job postings and unemployment claims, and highlight changes, challenges, and key trends identified in the first wave of the pandemic.

Effects of COVID-19 on Nursing Roles

COVID-19 impact to the nursing workforce in Massachusetts

Trends in UI claims and job postings varied by region and specialization.

- New UI claims among RNs peaked in May 2020. Recovery varied by region.
- Job postings for RNs dropped in April 2020. Recovery varied by region.
- UI claims differed by specialization; ambulatory care nurses were laid off or furloughed.

The shortage of Critical Care Nurses intensified during COVID-19. A surge capacity of Critical Care Nurses may be needed for future public health crises.

The pandemic interrupted an already-restricted pipeline of new nurses, limiting clinical placements and increasing wait times for licensing exams.

Attrition and retirements among RNs accelerated during the pandemic, posing long-term workforce challenges, as increasingly tough working conditions deter an aging RN workforce.

Nursing Roles

Nurses provide a range of patient care and physician support, and may work in a variety of settings including hospitals, physician's offices, community-based clinics, and long-term care facilities. These roles are often filled by a Registered Nurse (RN); education and training requirements for RNs include completion of clinical training, licensing exams, and Associates or Bachelors Degrees in Nursing.

Acute Care Nurses treat patients with short-term, acute injuries and illnesses. Patients are typically admitted to the hospital and require timely assessments and/or interventions. Care may take place in a variety of settings, including Emergency Departments, Urgent Care, and Critical Care.

Critical Care Nurses treat patients with critical and often life-threatening injuries or illnesses, who require immediate care. These nurses typically work in hospital ICUs or Emergency Departments.

Long-Term Care Nurses treat patients who require care for extended periods of time due to illnesses or conditions. They often work with elderly patients or people with disabilities. These nurses typically work in long-term care facilities, nursing homes, or rehabilitation centers.

Ambulatory Care Nurses treat patients who seek routine medical care, including care for chronic illnesses. These nurses treat patients in outpatient settings, such as physician's offices and specialty clinics.

Trends in nursing UI claims varied by specialization and job postings varied by region.

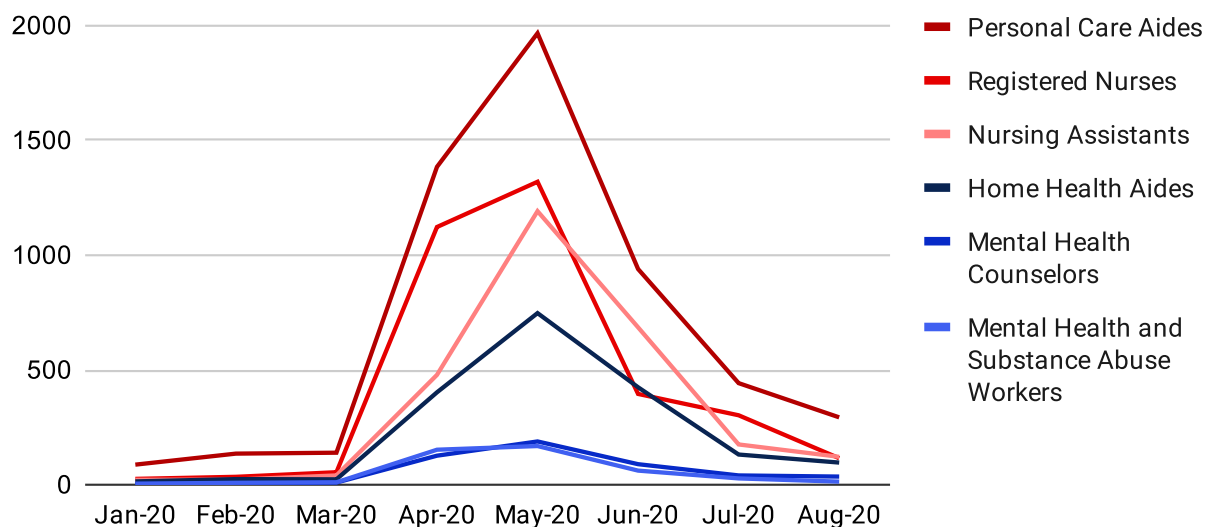
We focus on three nursing specializations, including Acute Care, Critical Care, and Long-Term Care. Insights are differentiated by nursing specialization when possible, although some of the available data groups all Registered Nurses together as one category.

During the first wave of the pandemic, trends in UI claims varied by nursing specialization, and trends in job postings data varied by region in Massachusetts. While the need for some types of nurses

increased during COVID, many ambulatory care nurses were laid off or furloughed as individuals postponed treatment for non-acute conditions and elective procedures, in accordance with guidelines issued by the Commissioner of Public Health.²² It is not yet clear if and when demand for ambulatory care nurses will rebound in the long-term.

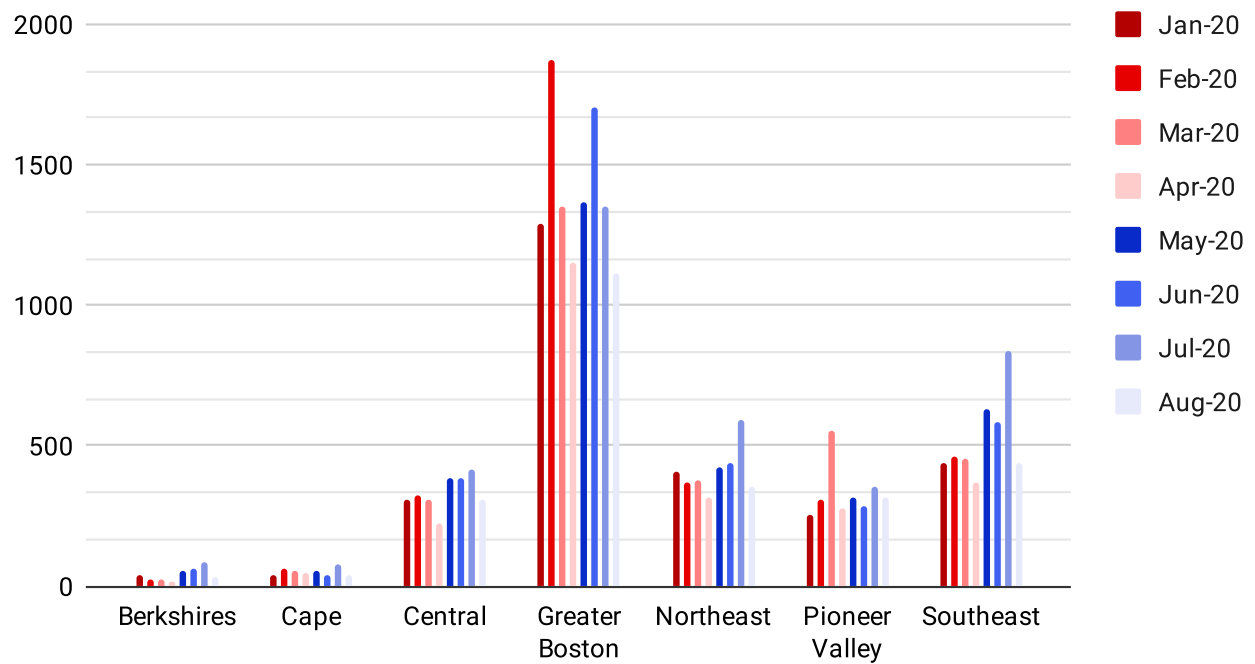
Spikes in job postings for nurses varied regionally during the first wave and following months. Greater Boston experienced a spike in job postings in June 2020, while other regions experienced spikes in March and July. By August, job postings in most regions were slightly lower than pre-pandemic postings in January and February.

Initial Permanently Separated Healthcare UI Claims, January through August, 2020²³



Massachusetts Department of Unemployment Assistance. Accessed in September 2020. Permanently separated claimants, January 2020 to August 2020.

Job Postings for RNs by Region, January through August, 2020²⁴



Burning Glass. Accessed in September 2020. Massachusetts Job Postings from January 2020 to August 2020.

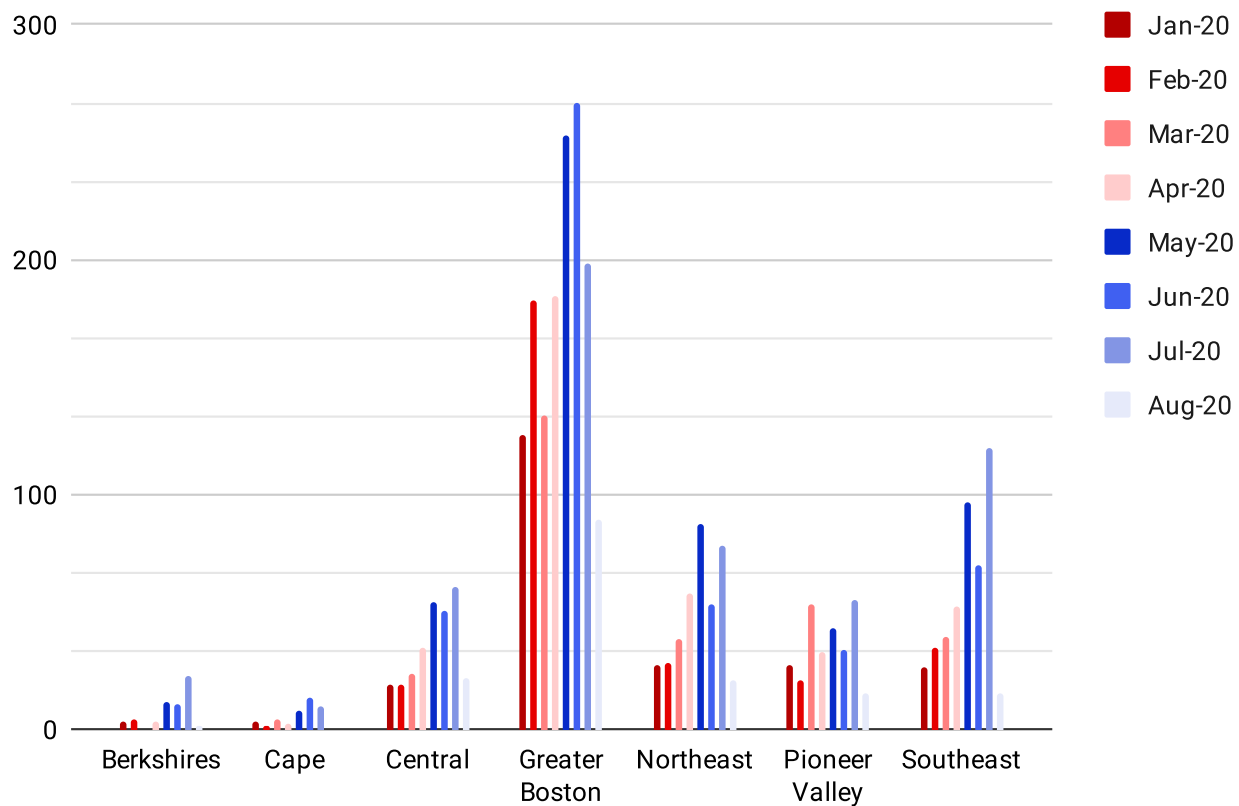
The shortage of Critical Care Nurses intensified during the pandemic.

Following the onset of the pandemic in March 2020, as waves of patients were admitted to hospitals, the demand for Critical Care Nurses increased across all regions in Massachusetts. Spikes in job postings varied by region. Greater Boston job postings for Critical Care Nurses peaked in May and June, while postings increased dramatically in May and again in July for many other regions. By August 2020, job postings approached pre-COVID levels across the state.

These trends suggest the need for a surge capacity of Critical Care Nurses in the event of future waves or public health crises. However, the Critical Care nurse pipeline is challenging to replenish, due in part to clinical training requirements. Critical Care Nurses complete one to two years of on-the-job

training after fulfilling all other education requirements. This makes it challenging to shift nurses with other specializations into these Critical Care roles, even during a crisis like COVID.

Job Postings for Critical Care Nurses by Region, January through August, 2020²⁵



Burning Glass. Accessed in September 2020. Massachusetts Job Postings from January 2020 to August 2020.

The pandemic interrupted an already-restricted pipeline of new nurses.

Before they are eligible to work as Registered Nurses, nursing students must meet federally- and state-mandated educational, training, and testing requirements. Because of the pandemic and social distancing requirements, many of these opportunities were interrupted, restricting the pipeline of new nurses from entering the workforce.

All nurses must pass state licensing exams prior to entering the workforce. Due to closures of testing centers in Massachusetts, new graduates experienced difficulties getting licensed. Delays of two to three months were expected, and interviews with stakeholders indicated some students were waiting up to five months to take tests.²⁶ Several interviewees expressed concern that these long wait times may increase exam failure rates.²⁷

In addition, opportunities for education in the classroom and lab, as well as clinical training placements, dramatically decreased in the months following the onset of COVID due to lockdowns, social distancing guidelines, and a reduced capacity for healthcare facilities to supervise trainees.²⁸ The limited placements created a backlog of students waiting for opportunities. Even as placements increase in availability as the public health situation and economy improve, experts anticipate that the backlog may take several cycles to clear.

Attrition and retirements among nurses accelerated during the pandemic, posing long-term workforce challenges.

Attrition and retirements among Registered Nurses were existing concerns prior to COVID. The median age of RNs in Massachusetts is greater than 50 years, and pre-COVID, retirements were widely expected to increase over the next several years. Between 2016 and 2019, the state experienced the departure of more than 4,200 RNs.²⁹

Now well over a year into the pandemic, Massachusetts is at an even greater risk of short- and medium-term RN shortages. Nurses of all ages have left and may continue to leave the workforce due to the

unprecedented working conditions experienced during COVID. Issues like the limited availability of PPE and COVID testing in the early stages of the pandemic, coupled with the risk of contracting the virus due to proximity to COVID patients before vaccines, created a highly stressful work environment for nurses. Industry leaders anticipate that some older nurses will accelerate retirements, leaving the workforce sooner than planned. In interviews, stakeholders also expressed concerns about the loss of knowledge and experience that will result from these retirements, and expect increased attrition and retirement to persist among nurses in the months and years ahead.³⁰

Effects of COVID-19 on Direct Care Roles

COVID-19 impact to the direct care workforce in Massachusetts

Direct care workers are highly vulnerable to the economic challenges of the pandemic.

- The population is disproportionately women, immigrants, and people of color.
- Direct Care work is strenuous, and wages are low.
- The \$600/week federal increase in unemployment benefits in 2020 was particularly meaningful and salient for these workers.

Pandemic impact on job postings and UI claims varied greatly for different direct care roles. Job postings for CNA positions remained high in the first wave, especially in LTCs, but were inconsistent for both HHAs and PCAs.

Consumer demand for in-home care appeared to decrease during the first wave. As consumers reduced hours for care providers, UI claims increased for both HHAs and PCAs.

The already-limited pipeline of new Direct Care workers was interrupted, as clinical training and licensing exams grew increasingly unavailable.

Direct Care Roles

Direct care workers provide patient services which vary by role, but may include the treatment and monitoring of conditions. They often provide long-term care and personal assistance to people with disabilities or other chronic conditions, and may assist with Activities of Daily Living (ADLs) including eating, bathing, and dressing.

Certified Nursing Assistants (CNAs) typically work in nursing homes, but may also work in assisted living facilities, other community-based settings, or hospitals. CNAs assist patients with ADLs, in addition to performing clinical tasks such as blood pressure readings. Before they are eligible for employment, CNAs must complete clinical training and are required to pass licensing exams. It is important to note that a similar role, Nursing Assistant, includes similar responsibilities, but does not require licensure.

Home Health Aides (HHAs) assist individuals in their homes or in community settings under the supervision of a nurse or therapist. HHAs may perform light housekeeping tasks such as preparing meals in addition to assisting patients with ADLs. Before entering the workforce, HHAs must complete several hours of training.

Personal Care Aides (PCAs) work in private or group homes and are often employed and supervised directly by consumers. PCAs typically assist with ADLs, light housekeeping and medication management, and transportation. PCAs have no minimum training requirements; they are typically employed directly by consumers, who prefer the freedom to select their PCAs of choice.

Direct care workers were disproportionately vulnerable to the effects of the pandemic.

Direct care workers face a multitude of life challenges, while working in roles that are demanding and low-wage.

Strenuous working conditions and low wages are the reality for most workers in direct care roles, including Certified Nursing Assistants (CNAs), Home Health Aides (HHAs), and Personal Care Aides (PCAs). These factors contribute to high attrition and chronic job openings in these roles, even before the onset of COVID. Many direct care workers hold multiple jobs to earn enough income for basic necessities.³¹ In addition, these roles are disproportionately filled by low-income women, immigrants and people of color.³² Nationally, nearly 40 percent of CNAs receive some form of public assistance.³³ Even pre-pandemic, they were 3.5 times more likely to be injured on the job than the average worker in the U.S.³⁴

Many low-income workers experience challenges outside the workplace -- including competing caregiving responsibilities and financial constraints -- that can contribute to high levels of turnover in the workforce. During interviews, educators cited personal events, even as seemingly routine as a flat tire, as becoming reasons for dropping out of a program or leaving a job. To maintain employment and advance in the workforce, the necessity of access to transportation, food security, and consistent access to childcare cannot be overstated. Unfortunately, many direct care workers have long lacked access to these wraparound supports. All of these circumstances are exacerbated by COVID-19, further disrupting the supply of workers for these essential roles.

Limited public transportation impeded the ability of many low-wage workers to get to work.

Social distancing requirements limited the availability of public transportation, impeding the ability of many direct care workers to travel to their places of work.³⁵ Due to the risk of COVID spread in crowded and enclosed spaces, many felt unsafe on buses

and trains. These disruptions impacted the ability of many healthcare workers -- particularly those in low wage roles, such as direct care workers -- to get to their jobs on time or at all. In Massachusetts, it became increasingly difficult to reallocate healthcare workers to high-need regions, especially to more remote areas of the state, with limited public transportation routes and schedules. While some medical centers expanded parking to accommodate more essential workers and other lots offered free or discounted parking options, public transportation remained limited and a challenge for many.³⁶

Enhanced UI rates exceeded employment income for some direct care workers.

Pre-pandemic, Massachusetts already offered the nation's most generous unemployment rate of up to \$835 per week.³⁷ The CARES Act, passed in March, created the Federal Pandemic Unemployment Compensation program, which distributed an additional \$600 per week in Federal unemployment compensation to qualified UI claimants.³⁸ In the first few months following the onset of the pandemic, some direct care workers who lost their jobs received more income from Unemployment Insurance than they had previously working in high-risk and low-wage jobs. In addition, those claiming unemployment were able to stay safe at home and care for family members. Some interviewees posited that the more generous unemployment insurance contributed to the difficulty in filling direct care roles during the first wave; however, the research evidence to date is unclear. National studies found that 70% of UI recipients who were re-employed in May and June 2020 had higher incomes on unemployment than they did on the job, but still returned to work when presented with the opportunity to do so.³⁹

Pandemic impacts on job postings and UI claims varied greatly for different direct care roles.

The volume of job postings for direct care workers fluctuated in the months following the onset of COVID, and recovery varied greatly by role. While CNA job posting volume remained high, job postings for both HHAs and PCAs was inconsistent in the spring and summer of 2020.

Impacts on CNAs

The Commonwealth of Massachusetts and long-term care (LTC) facilities consistently experienced high demand for CNAs, even prior to the pandemic. These facilities experienced severe CNA shortages during the first wave of COVID. Demand for CNAs fluctuated between March and July of 2020 in Greater Boston and several other regions. State-wide, while job postings decreased in April of that year, they rebounded and approached pre-COVID levels the following month. Additional data is required to evaluate the endurance of these trends.

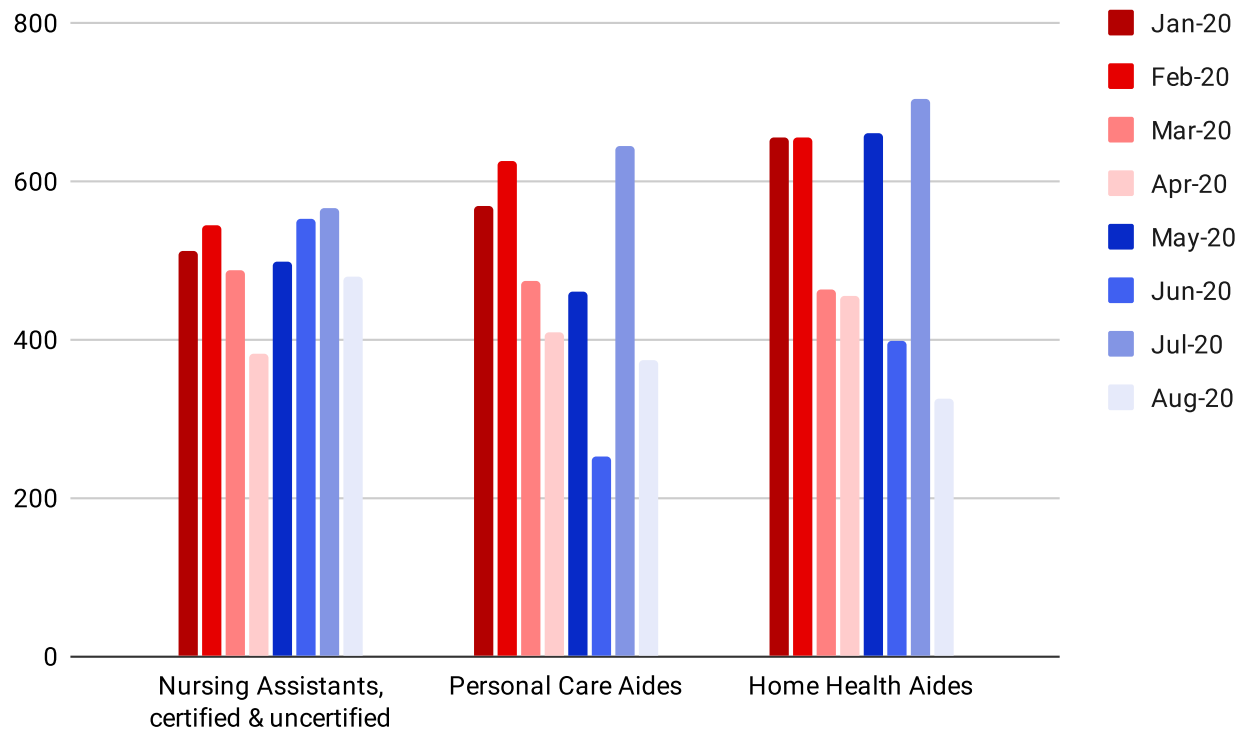
LTC settings in particular have a perpetual need for CNAs. LTCs have the lowest reimbursement rate among all CNA settings.⁴⁰ These particularly low wages may discourage CNAs from seeking employment in long-term care. In addition, staff and residents in LTC settings were at a disproportionately high risk for contracting and spreading COVID during the first wave, due to group care settings and aging populations. This may have further inhibited worker interest in filling CNA roles in these facilities.

Impacts on PCAs and HHAs

The impact of COVID in the spring and summer of 2020 varied for Personal Care Aides (PCAs) and Home Health Aides (HHAs), and recovery was uneven. Initial UI claims increased dramatically in March and peaked in May for both PCAs and HHAs. However, UI claims among PCAs remained high in August, while UI claims for many other roles, including HHAs, rebounded toward pre-COVID levels by August of 2020.

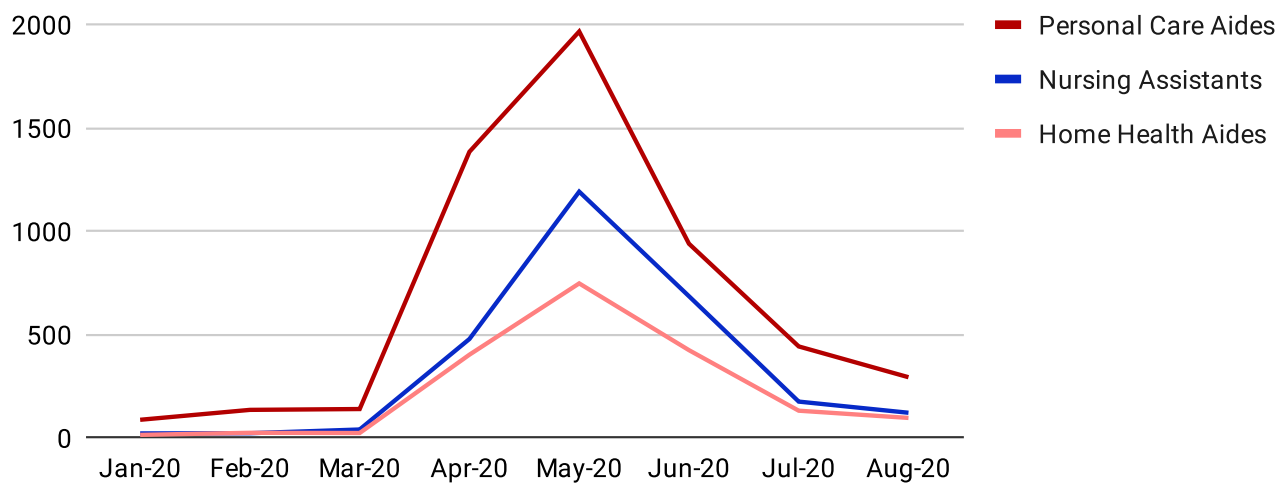
Statewide, job postings decreased in March and April 2020 for both PCAs and HHAs, but recovery fluctuated for both through August of that year. Beginning in March of 2020, job postings for PCAs fluctuated across all regions of the state, and Greater Boston experienced a spike in postings in July. For HHAs, job postings fluctuated inconsistently across Massachusetts, reaching pre-COVID levels in July before declining in Greater Boston and several other regions in August 2020.

Job Postings for Nursing Assistants, PCAs, and HHAs, January through August, 2020⁴¹



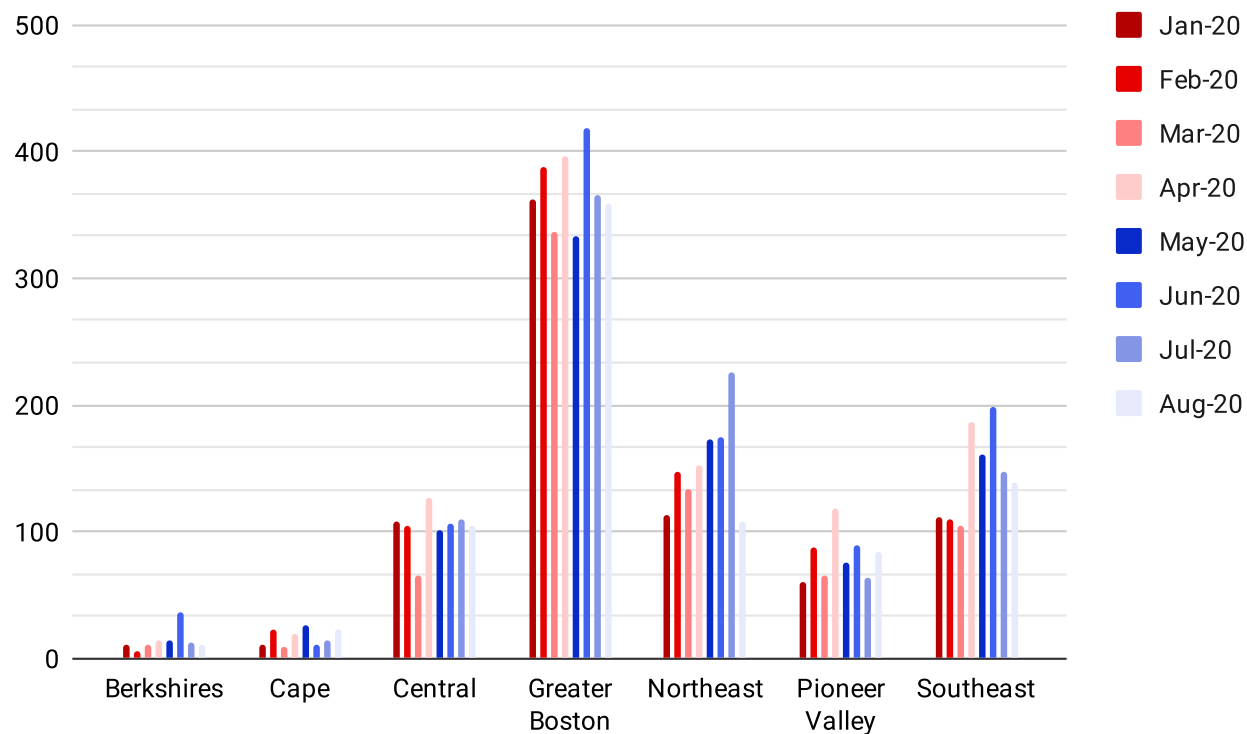
Burning Glass. Accessed in September 2020. Massachusetts Job Postings from January 2020 to August 2020.

Initial Permanently Separated Healthcare UI Claims for Direct Care Roles, January through August, 2020⁴²



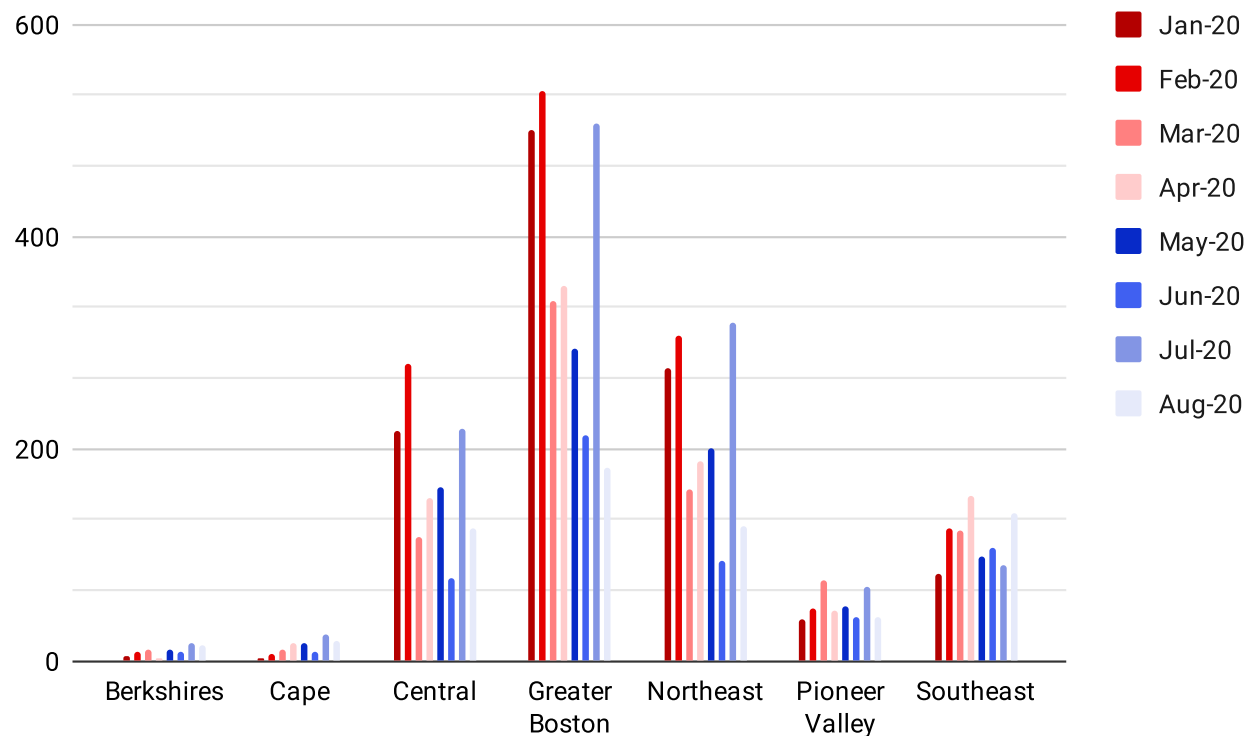
Massachusetts Department of Unemployment Assistance. Access in September 2020. Permanently separated claimants, January 2020 to August 2020.

Job Postings for Nursing Assistants (certified & uncertified) by Region, January through August, 2020⁴³



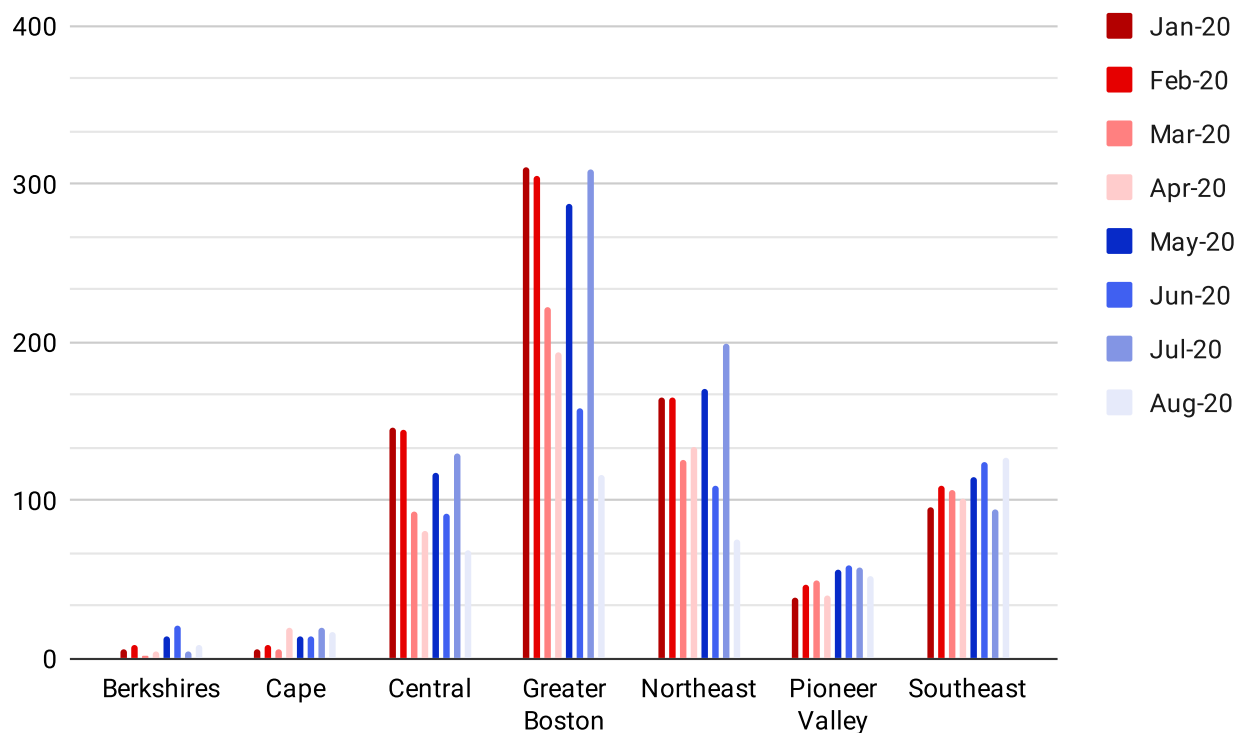
Burning Glass. Accessed in September 2020. Massachusetts Job Postings from January 2020 to August 2020.

Job Postings for PCAs by Region, January through August, 2020⁴⁴



Burning Glass. Accessed in September 2020. Massachusetts Job Postings from January 2020 to August 2020.

Job Postings for HHAs by Region, January through August, 2020⁴⁵



Burning Glass. Accessed in September 2020. Massachusetts Job Postings January to August 2020.

Consumer demand for in-home care appeared to decrease during the first wave.

PCAs and HHAs typically work in the homes of individual consumers. High levels of UI claims for these roles in the first wave of the pandemic can be tied to a few COVID-specific reasons, namely consumers' fears of having additional individuals in their homes, the ability of family members to take care of consumers while working from home, and consumers choosing to consolidate hours with fewer PCAs. A survey of Home Health Aide organizations in Massachusetts reported a 15% reduction in staffing, 23% reduction in number of clients served, and 16% reduction in hours served to clients between February and April of 2020.⁴⁶

The already-limited pipeline of new direct care workers was interrupted during the pandemic.

Newly trained direct care workers are required to obtain certification before entering the workforce. Following the onset of COVID, testing sites were closed due to mandatory lockdown requirements

in Massachusetts, preventing students from taking certification or licensing exams. During interviews, stakeholders expressed concerns that gaps between student training and testing could decrease the likelihood of passing exams.⁴⁷ Anecdotal evidence also indicates fewer clinical placements for CNAs were available than usual due to the strain on facility resources and decreased staff bandwidth to supervise and guide trainees during COVID, further impairing the pipeline of new direct care workers.⁴⁸ Similar to nursing, once the availability of testing and clinical placements increases, it may take several cycles to clear the backlog of students waiting for training and exam opportunities.

In an effort to address these staffing shortages, the Center for Medicare and Medicaid Services and the Massachusetts Department of Public Health temporarily waived the requirement that CNAs complete training within 90 days of hire,⁴⁹ which allowed student CNAs to enter and remain in the workforce without taking the licensing exam.⁵⁰ However, stakeholders interviewed suggested that many employers were hesitant to hire non-certified staff due to liability and risk concerns.⁵¹

Effects of COVID-19 on Behavioral Health Roles

COVID-19 impact to the behavioral health workforce in Massachusetts

Job postings for behavioral health workers decreased in April, but approached pre-pandemic levels by August 2020.

- Job postings decreased in April of 2020, while patient referrals from schools and hospitals were suspended.
- New UI claims increased dramatically in April and May of 2020, but approached pre-COVID levels by August.

Consumer demand for behavioral health services increased during the pandemic, as the crisis intensified stress on mental and behavioral health issues such as anxiety, depression, and substance abuse.

The use of telehealth greatly increased in behavioral health during the pandemic, with successes in rapid implementation and high patient satisfaction, and challenges in low reimbursement, and inability to adequately serve some consumers, like young children.

Behavioral Health Roles

Behavioral health workers support patients in achieving emotional and behavioral wellness. They may work in residential or outpatient settings. It is important to note that some behavioral health roles lack clear differentiation from others. In particular, emerging roles in peer recovery are less standardized, and the titles and responsibilities of peer recovery professionals vary. There is also inconsistency in how data is captured and presented for behavioral health roles in UI claims and job postings. While titles and responsibilities vary, some typical behavioral health roles include:

Mental Health Counselors may provide mental health evaluation and therapy to clients. The title may refer to a number of distinct roles, and the services provided by counselors will depend on training, education, and licensure received.

Licensed Social Workers are trained to evaluate clients' mental health, and may provide therapy and case management. Licensed Social Workers hold advanced degrees and accreditation.

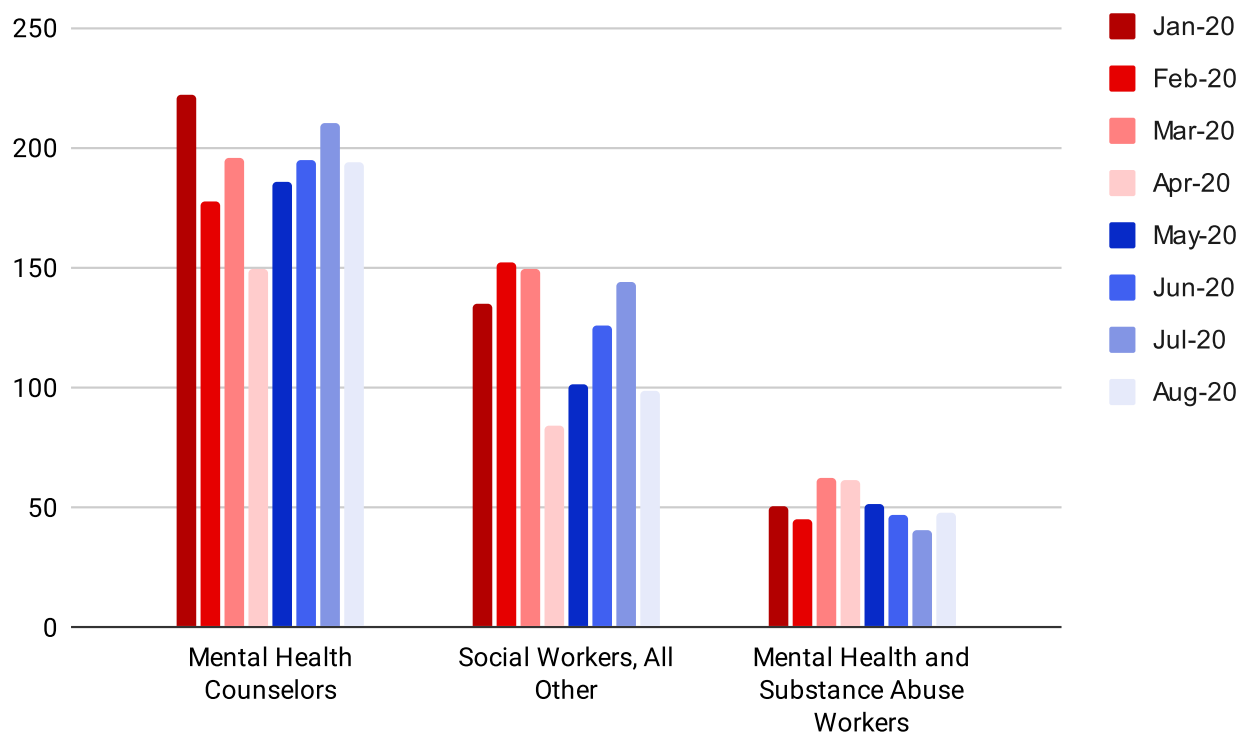
Licensed Alcohol and Drug Counselors provide mental health evaluation and therapy to clients who have issues with substance use and dependency. These counselors are required to hold advanced degrees and accreditation.

Job postings for behavioral health workers decreased in April, but approached pre-pandemic levels by August.

Behavioral health occupations including Mental Health Counselors and some Social Workers saw a decrease in job postings in April of 2020 but approached pre-COVID levels over the summer of 2020. Stakeholder interviews indicated job postings may have dropped in April of that year due

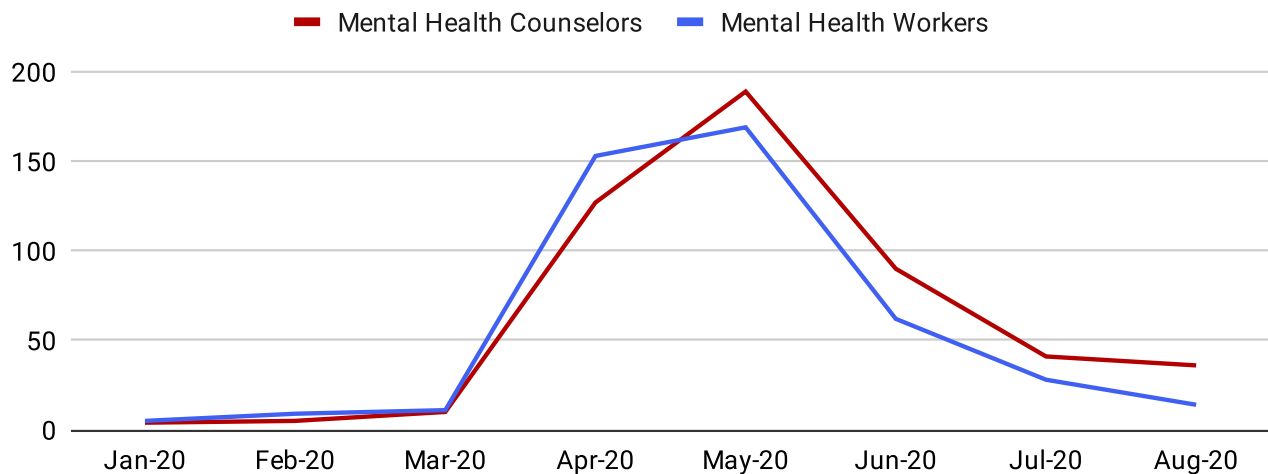
to suspension of behavioral health referrals from schools and hospitals during the peak of the crisis. Unlike many other healthcare roles, job postings for Mental Health and Substance Abuse Social Workers actually increased in March and April of 2020 before returning to pre-COVID demand levels. By August 2020, job postings for behavioral health roles remained lower than in January 2020. The volume of initial UI claims for behavioral health workers peaked in April, but approached pre-COVID levels by August 2020.

Job Postings for Behavioral Health Roles, January through August, 2020⁵²



Burning Glass. Accessed in September 2020. Massachusetts Job Postings from January 2020 to August 2020.

Initial Permanently Separated Healthcare UI Claims for Behavioral Health Roles, January through August, 2020⁵³



Massachusetts Department of Unemployment Assistance. Access in September 2020. Permanently separated claimants, January 2020 to August 2020.

Consumer demand for behavioral health services increased during the pandemic.

In our qualitative research, interviewees repeatedly predicted that the stresses of the pandemic were likely to increase demand for behavioral health services in the short-to-medium-term. A nationwide survey on COVID and mental health found that over half the 1500 participants has experienced recent trouble with sleep, anxiety, depression, and feelings of isolation.⁵⁴ The appearance of mental health symptoms following traumatic events are often delayed for months or even years; the demand for behavioral health services may continue to increase over the coming years due to pandemic-related trauma.⁵⁵

The use of telehealth among behavioral health workers spiked during the pandemic.

Telehealth programs in Massachusetts had been designed and tested periodically over the past five to ten years, but, in the absence of necessity, these programs “went nowhere,” according to an

interview with a leader in primary care practice and transformation.⁵⁶ In the wake of COVID and social distancing requirements, telehealth programs were implemented by some Massachusetts organizations in “less than a week.”⁵⁷ State and Federal waivers further expanded the abilities of providers to care for patients via telehealth. While the rapid implementation of telehealth programs posed some challenges, feedback from both providers and consumers indicate these efforts were largely successful during the first wave.

Prior to COVID, only some providers were eligible to receive Medicare reimbursement for telehealth. The Centers for Medicare and Medicaid Services (CMS) waived requirements that previously limited the types of providers who can provide telehealth services; under the waiver, any provider currently eligible to bill Medicare for services may receive payment for providing those services via telehealth.⁵⁸ Additionally, for some services, CMS waived the requirement for telehealth to include video, allowing services to be provided via audio only.⁵⁹ Similarly, Governor Baker ordered health insurance companies to allow Massachusetts providers to “deliver clinically appropriate, medically necessary covered services to members via telehealth,” including in-network behavioral health providers.⁶⁰

Low reimbursement rates may cause telehealth to become less appealing to providers than in-person care in the longer-run. While CMS expanded reimbursement eligibility for telehealth during COVID, providers reported that video calls and phone calls do not bill as well as in-person visits. Qualitative interviews also indicated that payers are embracing telehealth at different levels.⁶¹ Behavioral health providers anticipated reductions to reimbursement rates in the future, particularly when COVID cases decrease substantially.

Feedback from both staff and consumers on the implementation of telehealth in Massachusetts during the first wave of the pandemic was positive overall. In interviews, stakeholders indicated technology training for staff went relatively smoothly overall.⁶² In most cases, providers were able to access video conferencing software, and were comfortable instructing patients to do the same. However, some expressed a desire for additional training, or the need for a company-provided computer. Consumers also reported satisfaction with telehealth services. According to a survey conducted by Aspire Health Alliance of over 300 behavioral health patients, 93% responded that telehealth met their needs and 73% would like to continue to have the option of telehealth in the future.⁶³ Telehealth also allows for greater flexibility in scheduling and improves appointment attendance. Nearly half of survey respondents indicated they would have difficulty attending in-person appointments without telehealth; staff also reported a decrease in no-show rates for appointments.⁶⁴

However, stakeholders anticipate several ongoing challenges to providing telehealth services in Massachusetts and elsewhere. First, access to telehealth is limited by the availability of technology. Many low-income patients may not have consistent access to the internet and a computer, or may share one computer among several family members. Others may be in crowded home settings during telehealth sessions, where the ability to have safe, private conversations is limited. Additionally, telehealth is not suitable for every patient. In particular, it is difficult to provide adequate behavioral healthcare via telehealth for young children, patients with schizophrenic symptoms, and patients in substance abuse recovery.⁶⁵ Additionally, providers expressed concern in missing important information when not

seeing patients face-to-face, such as body language and other indicators of mental health that may not be revealed on a video call.⁶⁶

While there were both successes and challenges in the implementation of telehealth, the rapid response of employers, employees, and State and Federal regulators during the first wave of the pandemic allowed for continuity in patient care. Both providers and consumers reported satisfaction with the services. Our research indicates that future workers in behavioral health roles will likely require digital skills to implement telehealth services.

Effects of COVID-19 across Healthcare Roles

While this brief focuses on three occupations that were prioritized before the onset of COVID, many impacts of the first wave of the pandemic were felt across healthcare roles and care settings. This section details several factors that universally affected the healthcare workforce in Massachusetts, and the challenges and opportunities that have emerged as a result.

Significant childcare challenges emerged and were exacerbated during the pandemic.

Childcare availability is limited and costs are high.

Access to childcare services has long been challenging for many parents and caregivers in the Massachusetts healthcare workforce. US Census data indicates 26% of frontline healthcare workers in the state are parents to children under the age of fourteen.⁶⁷ Prior to the pandemic, demand for childcare in Massachusetts was high, but availability was limited, as illustrated by long waitlists at childcare facilities.

In addition, the cost of childcare has been unaffordable to many in the healthcare workforce, particularly for residents of Boston.⁶⁸ The average cost of care in Massachusetts for a young child is upwards of \$1200 per month -- 68% of median annual earnings for direct care workers.⁶⁹ Given their income levels, many direct care workers struggle to afford paid childcare.⁷⁰ However, while some subsidies are available in Massachusetts to offset the high costs of childcare for low-income workers, they have historically been very limited in quantity and have stringent eligibility requirements.⁷¹ In addition, in the first wave of the pandemic, fewer childcare slots than usual were available due to social distancing requirements and the closures of private childcare businesses.⁷²

Working parents were affected by rapidly shifting childcare needs, especially women.

While availability and cost have long been obstacles to childcare access, the pandemic resulted in substantial new challenges for parents and caregivers, including those in the healthcare workforce. Many school-aged children spent more time at home due to full or partial school closures during the spring of 2020. Subsequently, many working parents became primary providers of childcare, in addition to supporting young children with remote schooling. Further, parents had limited foresight into the days and times childcare would be needed, as time spent at home could shift rapidly; schooling wavered between fully and partially remote, and children exposed to COVID are required to immediately quarantine at home. Stakeholder interviews revealed that demand for group childcare settings decreased in the spring and summer of 2020 due to COVID-related safety concerns. As a result, many healthcare workers found themselves unable to return to work. This issue disproportionately impacted women, as the responsibilities of childcare are more likely to fall to women when childcare services are unavailable or inaccessible.⁷³ The majority of healthcare professionals in Massachusetts are women, including 77% of Healthcare Practitioners and those in Technical Occupations, as well as 86% of employees in Healthcare Support Occupations.⁷⁴ According to a national survey, more than one-quarter of women who became unemployed during the pandemic reported this was due solely to lack of childcare.⁷⁵

“Childcare is a critical piece of our economic infrastructure that enables parents to get to work just like roads and bridges do for commuters. The coronavirus pandemic has exposed the previously invisible link between childcare and the economy, causing employers to come up with new solutions to support working parents, especially front-line workers such as in health-care.”

Alicia Sasser Modestino, Associate Professor, School of Public Policy and Urban Affairs, and Department of Economics, Northeastern University

Expanded childcare programs proved unpopular due to parents’ safety concerns.

While some of the healthcare workforce may not return to work, many returned out of necessity, including low-wage earners who cannot afford a loss of income. These individuals often depend on informal childcare arrangements, which may not be consistent or sustainable in the long-term.⁷⁶ To address these challenges, a number of Massachusetts healthcare employers provided on- or off-site childcare services, and the State invested more than \$160 million to subsidize and support these efforts.⁷⁷ However, early in the pandemic, many of these programs proved less popular than anticipated; large shares of new childcare slots in Massachusetts remained unfilled as parents feared the spread of the virus in group care settings. Interviews with stakeholders indicate some informal childcare “pods” experienced more success, as they were established by colleagues who knew and trusted one another. While access to childcare has long been an issue for working parents, the pandemic created unique and ongoing caregiving challenges that impacted the ability of the healthcare sector to both attract and retain workers.

PPE and safety concerns discouraged workers from maintaining healthcare roles, and restricted the pipeline of new workers.

Frontline healthcare workers have faced tremendous risks to their health and safety throughout the pandemic, and especially prior to the availability of vaccines. The use of Personal Protective Equipment (PPE) -- such as gowns, gloves, masks, and eye protection -- is a necessity to safeguard the workforce from contracting the virus.

However, supply of PPE was limited in Massachusetts and throughout the country during the first few weeks and months after the onset of the pandemic. While the State contributed funding and supplies, healthcare workers in Massachusetts reported experiences of chaos in urgent searches for supplies in the onset of the pandemic.⁷⁸ Additionally, interviews with stakeholders indicated many frontline workers in Massachusetts did not initially have adequate access to COVID testing during the early days of the first wave. As many of these workers were in close proximity to COVID patients on a consistent basis, their inability to test themselves for the virus escalated their concern for the safety of their families. Even with state funding for PPE and other safety measures, the risk of contracting COVID resulted in understandable levels of fear and concerns among healthcare workers, which made recruiting and retaining a workforce challenging. Field hospitals that were set up to treat COVID patients in the first wave had difficulty recruiting staff, and some workers left their healthcare roles altogether.⁷⁹

During the spring of 2020, students and training providers also lacked access to enough PPE, as the limited supply was understandably prioritized for allocation to practicing healthcare professionals. The PPE shortage restricted the ability of students to complete training in group and on-site care settings. Massachusetts test centers, which administer licensing exams to healthcare trainees, also closed. This was due in part to lack of PPE, in addition to lockdown requirements and social distancing guidelines. This lack of safety resources impeded the training and testing of students, restricting the pipeline of new workers entering the healthcare

field in the early months of the pandemic.

The transition to online learning and certification was more challenging for healthcare than other fields.

As seen in other fields, lockdowns, safety concerns, and social distancing requirements created a necessary shift to online learning for some healthcare education and training programs in Massachusetts. However, the transition to online learning is more complex for healthcare than for most other fields. Many healthcare specializations require students to complete clinical placements and on-the-job training. These requirements are mandated by the State and typically require in-person attendance. Many lab skills must also be taught in person. As a result, the learning and certification opportunities provided online were limited.

Response in Policy and Practice

As immense and unprecedented challenges in the healthcare workforce emerged during the first wave of the pandemic, Massachusetts piloted new approaches to educating healthcare trainees, providing patient care, and filling essential roles. The descriptions below catalog some of the early changes that were implemented both in policy and in practice across the sector.

Educators and employers implemented new practices to support a pipeline of new healthcare workers.

Long-term care job portal created to address hiring challenges

To help address recruitment and hiring challenges in LTC facilities, the Commonwealth of Massachusetts developed its first-ever online job portal dedicated specifically to filling roles in this care setting. The portal included more than 20,000 job openings

for Registered Nurses, Certified Nursing Assistants, Social Workers, Resident Care Assistants, and other roles across the state.⁸⁰ Candidates submit their information, and are matched with facilities seeking skills, experiences, and preferences aligned with candidate profiles. The state also offered incentives for applicants to accept employment at LTC facilities; for a period of time, a \$1,000 signing bonus was offered to new LTC staff who accepted a job they found through the portal.⁸¹

Simulations and online learning replaced some on-site training

As COVID reduced access to on-site classes and clinical placements for CNA students, training providers across the state implemented and expanded programs for healthcare students to engage in remote learning. Massachusetts permitted some changes to healthcare curriculum to allow for both synchronous and asynchronous online instruction. Since the pandemic hindered student access to clinical placements, the Massachusetts Board of Registration in Nursing approved the expansion of simulations for some nursing programs.⁸² Additionally, stakeholders indicated that other aspects of clinical training for nurses were transitioned online, or were conducted with a hybrid online-onsite approach.⁸³

State and federal regulators responded rapidly to support healthcare workers, employers, and consumers.

Out-of-state nurses

In the spring of 2020, Governor Baker, like many Governors around the country, issued an executive order allowing out-of-state nurses to work in Massachusetts. Interviewees consistently cite this action as essential for staffing healthcare facilities during COVID. The order allowed nurses to temporarily work in Massachusetts for the length of the COVID emergency, as long as their license was in good standing in their home state. Nurses were also allowed to provide on-site or telehealth services.⁸⁴

Nurses with expired licenses

The State also permitted nurses with expired licenses to practice nursing during the emergency. Nurses

who held a license in the past ten years could renew their licenses immediately upon request, provided their license had not been revoked or suspended.⁸⁵

Waivers for RN and CNA licensing

Licensing exams for nurses and CNAs became less accessible during the early months of COVID, as testing centers closed and the exam was put on hold. As a short-term fix to this challenge, licensing requirements were waived until exams could be administered. The Centers for Medicare and Medicaid Services (CMS) waived the requirement that CNAs be tested within 120 days of hire, and similarly, the Massachusetts Department of Public Health (DPH) waived the requirement that CNAs complete training within 90 days of hire, though both CMS and DPH continued to reiterate that CNAs must demonstrate competency in patient care techniques on an ongoing basis.⁸⁶

In Massachusetts, many CNA roles were filled by promoting Resident Care Assistants (RCAs), who work closely with Certified Nursing Assistants and provide patient services such as feeding, hydration and hygiene, and may also complete clerical tasks.⁸⁷ Massachusetts also permitted nursing students in their final semester of school to work in nursing before attaining licensure, so long as patient care was provided at the direction of a licensed healthcare facility and under the supervision of a licensed nurse in response to the COVID-19 outbreak.⁸⁸

Alternate sites for CNA training

While CNA students were traditionally required to complete clinical placements in long-term care facilities, the Massachusetts Department of Public Health approved clinical placements at some alternate sites to increase the pipeline of new CNAs. These alternate placements were approved only when LTC placement was unavailable.⁸⁹

Financial packages for providers and facilities

In the spring of 2020, the Baker-Polito Administration of Massachusetts announced several new financial packages to support healthcare providers and facilities in the state, including \$290 million in immediate cash relief, \$550 million in accelerated

payments to providers, as well as \$800 million to support hospitals, LTCs, direct care workers, and behavioral health providers, among others.⁹⁰

Hazard pay

After the onset of the pandemic, both Federal and State regulators approved hazard pay for many essential workers. In May 2020, the federal HEROES Act was passed, which included a “Heroes Fund” of \$200 billion; eligible workers could receive up to \$25,000 in “pandemic premium pay” from the start of the pandemic through the end of 2020.⁹¹ In Massachusetts, the state legislature passed an emergency law to provide Hazard Pay for Essential Workers at one-and-a-half times their actual earnings.⁹² The Commonwealth also formed an agreement with a healthcare union to provide hazard pay to more than 6,000 healthcare workers in the state; practitioners with licenses were eligible for up to \$10 per hour, while healthcare workers without licenses were eligible for up to \$5 per hour.⁹³

Areas for Future Research

In contrast to the short-term impacts of COVID’s first wave, many longer-run effects on the healthcare workforce remain uncertain. Further research is needed to understand long-term trends in student enrollments in healthcare training programs, updates to CNA curriculum and licensing, retirement rates among nurses, shifts in care settings, and the utilization of telehealth.

Student enrollment

Enrollment in healthcare training programs in Massachusetts changed significantly during the first wave of the pandemic. In the coming months, real-time enrollment monitoring will help illuminate the effects of the pandemic on the supply of new entrants into the healthcare workforce pipeline. Key questions for further research on healthcare student enrollment include:

- As the Commonwealth advances in its recovery, how will enrollment patterns across healthcare training programs change?
- Will community college enrollment continue to decline in the short- to medium-term, or will enrollment quickly stabilize and recover?
- Will student demand increase for online education options, as provided by many institutions during the pandemic, or will they prefer on-site or hybrid learning?

CNA curriculum and licensing

The curriculum and licensing exams for Certified Nursing Assistants posed concerns prior to COVID. The Massachusetts Healthcare Collaborative has identified the Commonwealth’s CNA training and certification testing processes as a priority for future study and intervention. Key research questions include:

- To what extent do student attrition rates and exam failure rates affect the supply of new CNAs to the healthcare workforce?
- What are the root causes of pipeline problems and inefficiencies, including attrition rates, lengthy wait times for licensing exams, and exam failure rates?
- What are effective strategies that can be leveraged by policymakers, educators, and employers to address the root causes of pipeline issues?

Burnout and attrition

Attrition among the healthcare workers in Massachusetts was a concern prior to COVID, particularly for the aging RN workforce. The first wave of the pandemic intensified concerns of attrition and burnout. In qualitative interviews, many respondents noted the extreme stress experienced by frontline workers during the pandemic, leading many to consider early retirement or a change in field or role. Questions for future research include:

- To what extent has the pandemic accelerated retirements, especially among nurses?
- As the vaccination campaign progresses, will the rate of early retirements and other exits from the healthcare labor market persist?

- To what extent will the loss of workers with decades of experience impact the healthcare sector, and what strategies will Massachusetts implement to compensate for this loss in knowledge and experience?

Shifts in care settings

Following the onset of COVID, consumers made critical choices about the delivery and setting of their care. Of consumers who received in-home care, many resolved to limit the individuals in their homes out of fear of contracting COVID. Others received care from family members who were working from home. Key questions for further research include:

- How will patient demand change for in-home care vs. residential and group care settings?
- If the demand for care settings changes significantly in Massachusetts, to what extent will new roles or licenses become necessary?

Telehealth

Telehealth use increased dramatically in Massachusetts during the first wave of COVID, across behavioral health, primary care, acute care, and critical care settings. Modifications to state policies enabled providers to reach more patients remotely; Governor Baker ordered health insurance companies to reimburse Massachusetts providers for delivering “clinically appropriate, medically necessary covered services to members via telehealth.”⁹⁴ Questions for further study on telehealth include:

- How will state and federal policies that temporarily authorized telehealth service delivery change when COVID risk significantly decreases?
- How will reimbursement rates be adjusted, and will those rates encourage or discourage providers from utilizing telehealth?
- What will data and evaluation of telehealth programs reveal in terms of patient health outcomes?
- Was the expansion of telehealth during the onset of the pandemic more effective in particular care settings or for certain patient demographics than others?

- Will telehealth be used more extensively in clinical training in the future?

Conclusion

The pandemic induced broad shocks to the labor market far beyond the healthcare sector. For instance, employment in the hospitality industry in Massachusetts decreased by 31% between January and November 2020, and in the Boston metro region, there was a 28.3% decrease in employment rates for low-wage workers across all industries between January and November 2020.⁹⁵ For many, COVID-19 was a disruption unlike any seen in a lifetime.

In a labor market where the number of job-seekers was more than double the number of jobs available, many local leaders looked to the healthcare sector as a possible destination for displaced workers. Some training programs in Massachusetts pivoted quickly to place participants in non-clinical roles in the healthcare sector – such as service roles at hospitals – when they had previously been slated to enter sectors devastated by the pandemic, like the hospitality industry.⁹⁶ These local trends were reflected nationally; a May 2020 report released by Burning Glass Technologies highlights Personal Care Aide roles as “lifeboat jobs” that could offer work opportunities for “at least some of those who have lost work and that require little or no retraining” and provide “pathways from jobs lost in the pandemic into roles with decent pay and a solid future.”⁹⁷

Whether displaced workers from other industries will continue to enter the healthcare sector, or remain in healthcare roles secured during the pandemic remains an open question. Research indicates that many job-seekers have considered entering a new industry. For instance, July 2021 polling from the Washington Post found that roughly one in three U.S. workers under 40 have considered changing their occupation or field of work since the pandemic began.⁹⁸

At the same time, the pandemic has made clear to the general public that many healthcare roles, particularly those in direct patient care, are essential but exceedingly challenging and strenuous jobs. Many are low-paid, a fact which is linked to low reimbursement rates from public programs.⁹⁹ In addition, transitions to new occupations and industries may be attractive in theory but have often been difficult to execute in practice. During the Great Recession, local efforts sought to reskill and shift workers from manufacturing into healthcare roles, but there is limited evidence indicating these programs were widely successful.¹⁰⁰

The healthcare sector appears to be a compelling option for Massachusetts residents looking to reskill or change roles during the COVID recovery. However, whether these transitions materialize depends on a variety of factors, including accessibility of training, job quality, employee satisfaction and retention, and opportunities for advancement. Meanwhile, today's healthcare workers continue to display impressive resilience, adapting and serving in the midst of ongoing uncertainty. Pandemic-induced shifts in the sector are ongoing, and much remains in flux. However one thing is clear -- the future of the healthcare workforce will not be "back to normal;" it must be a "new normal."

Endnotes

- 1 Andrew Mikula, Rebekah Paxton, and Pioneer Institute, “Broad Industry Sector Trends in Massachusetts, 1998-2018: A MassEconomix Report,” September 28, 2020, <https://pioneerinstitute.org/pioneer-research/broad-industry-sector-trends-in-massachusetts-1998-2018-a-masseconomix-report/>.
- 2 Ibid.
- 3 Ibid.
- 4 Commonwealth Corporation and Center for Labor Markets and Policy, Drexel University, “Health Care Employment, Structure and Trends in Massachusetts: Chapter 224 Workforce Impact Study,” December 2016, 224, http://commcorp.org/wp-content/uploads/2017/07/Resources_Health-Care-Workforce_Employment-Structure-and-Trends-in-Massachusetts.pdf.
- 5 Ibid.
- 6 Ibid.
- 7 Ibid.
- 8 Ibid.
- 9 Boston Consulting Group, “2018 Analysis.”
- 10 Commonwealth Corporation and Center for Labor Markets and Policy, Drexel University, “Health Care Employment, Structure and Trends in Massachusetts: Chapter 224 Workforce Impact Study,” 224.
- 11 Ibid.
- 12 U.S. Bureau of Labor Statistics, “May 2019 OES State Occupational Employment and Wage Estimates Massachusetts,” May 2019, https://www.bls.gov/oes/current/oes_ma.htm#29-0000.
- 13 PHI, “Workforce Data Center: Direct Care Worker Median Annual Earnings, 2018,” Direct Care Worker Median Annual Earnings, 2018 (blog), accessed April 5, 2021, <https://phinational.org/policy-research/workforce-data-center/>; PHI, “U.S. Home Care Workers: Key Facts.”
- 14 Executive Office of Labor and Workforce Development (EOLWD), “Analysis: Local Occupational Workforce Demographics Dashboard,” Tableau Software, March 2020, https://public.tableau.com/views/LocalOccupationalWorkforceDemographics/LocalWorkforceDemographicsDashboard?%3Aembed=y&%3AshowVizHome=no&%3Adisplay_count=y&%3Adisplay_static_image=y&%3AbootstrapWhenNotified=true&%3ALanguage=en&:embed=y&:showVizHome=n&:apiID=host0#navType=2&navSrc=Parse; New American Economy Research Fund, “Immigrant Healthcare Workers Are Critical in the Fight Against Covid-19,” New American Economy Research Fund, April 9, 2020, <https://research.newamericaneconomy.org/report/covid-19-immigrant-healthcare-workers/>.
- 15 PHI, “Workforce Data Center: Direct Care Workers by Gender, 2018,” Direct Care Workers by Gender, 2018 (blog), accessed April 5, 2021, <https://phinational.org/policy-research/workforce-data-center/>; PHI, “Workforce Data Center: Direct Care Workers by Race and Ethnicity, 2018,” Direct Care Workers by Race and Ethnicity, 2018 (blog), accessed April 5, 2021, <https://phinational.org/policy-research/workforce-data-center/>; PHI and Robert Espinoza, “Immigrants and the Direct Care Workforce,” June 2017, http://phinational.org/wp-content/uploads/2017/06/immigrants_and_the_direct_care_workforce_-_phi_-_june_2017.pdf.
- 16 Massachusetts Department of Public Health, “Weekly COVID-19 Public Health Report: September 2, 2020,” September 2, 2020, <https://www.mass.gov/doc/weekly-covid-19-public-health-report-september-2-2020/download>.
- 17 Centers for Disease Control and Prevention, “United States COVID-19 Cases and Deaths by State over Time,” Data.CDC.gov, accessed April 5, 2021, <https://data.cdc.gov/Case-Surveillance/United-States-COVID-19-Cases-and-Deaths-by-State-o/9mfq-cb36/data>.
- 18 Ben Teasdale and Kevin A. Schulman, “Are U.S. Hospitals Still ‘Recession-Proof’?,” *New England Journal of Medicine* 383, no. 13 (September 24, 2020): e82, <https://doi.org/10.1056/NEJMp2018846>.
- 19 Commonwealth Corporation and Center for Labor Markets and Policy, Drexel University, “Health Care Employment, Structure and Trends in Massachusetts: Chapter 224 Workforce Impact Study,” 224.
- 20 Massachusetts Department of Unemployment Assistance, “Permanently Separated Claimants, Jan 2020 to Aug 2020.”
- 21 Federal Reserve Bank of Atlanta, “Unemployment Claims Monitor,” accessed April 30, 2021, <https://www.atlantafed.org/cweo/data-tools/unemployment-claims-monitor>.

- 22 Charles D Baker et al., “Order of the Commissioner of Public Health Regarding the Scheduling and Performance of Urgent Elective Invasive Procedures,” May 18, 2020, <https://www.mass.gov/doc/order-on-elective-surgery-may-18/download>.
- 23 Massachusetts Department of Unemployment Assistance, “Permanently Separated Claimants, Jan 2020 to Aug 2020.”
- 24 Burning Glass Technologies, “Massachusetts Job Postings from January 2020 to August 2020.”
- 25 Ibid.
- 26 Leader in Nursing Employment and Executive in Nursing Employment, Expert Interview, June 24, 2020.
- 27 Leader in Higher Education and Workforce Development and Leader in Nursing and Clinical Placements, Expert Interview, December 17, 2020.
- 28 Ibid.
- 29 Bureau of Labor Statistics, “BLS Massachusetts OES Occupation Data, 2013 - 2019,” <https://www.bls.gov/oes/home.htm>.
- 30 Leader in Nursing Employment and Executive in Nursing Employment, Expert Interview.
- 31 Reagan A. Baughman, Bryce Stanley, and Kristin E. Smith, “Second Job Holding Among Direct Care Workers and Nurses: Implications for COVID-19 Transmission in Long-Term Care,” *Medical Care Research and Review*, November 19, 2020, 1077558720974129, <https://doi.org/10.1177/1077558720974129>.
- 32 Commonwealth Corporation and Center for Labor Markets and Policy, Drexel University, “Selected Health Care Support and Direct Care Occupations in Massachusetts,” September 2016, <https://www.mass.gov/files/documents/2017/07/zv/Selected%2520Health%2520Care%2520Support%2520and%2520Direct%2520Care%2520Occupations%2520in%2520MA.pdf>.
- 33 PHI National, “U.S. Nursing Assistants Employed in Nursing Homes: Key Facts,” <https://phinational.org/wp-content/uploads/legacy/phi-nursing-assistants-key-facts.pdf>.
- 34 Ibid.
- 35 Mass.gov, “Public Transportation in Massachusetts,” accessed December 7, 2020, <https://www.mass.gov/info-details/public-transportation-in-massachusetts>.
- 36 “Discounted Garages for Hospital Staff in Boston,” Boston.gov, March 25, 2020, <https://www.boston.gov/news/discounted-garages-hospital-staff-boston>.
- 37 Mass.gov, “How Your Unemployment Benefits Are Determined | Mass.Gov,” accessed February 9, 2021, <https://www.mass.gov/info-details/how-your-unemployment-benefits-are-determined>.
- 38 U.S. Department of Labor, “Unemployment Insurance Relief During COVID-19 Outbreak,” accessed December 7, 2020, <https://www.dol.gov/coronavirus/unemployment-insurance>.
- 39 Heidi Shierholz, “Joblessness Remains at Historic Levels and There Is No Evidence UI Is Disincentivizing Work: Congress Must Extend the Extra \$600 in UI Benefits,” *Economic Policy Institute* (blog), July 23, 2020, <https://www.epi.org/blog/joblessness-remains-at-historic-levels-and-there-is-no-evidence-ui-is-disincentivizing-work-congress-must-extend-the-extra-600-in-ui-benefits/>.
- 40 Leader in Workforce Development, Expert Interview, July 8, 2020.
- 41 Burning Glass Technologies, “Massachusetts Job Postings from January 2020 to August 2020.”
- 42 Massachusetts Department of Unemployment Assistance, “Permanently Separated Claimants, Jan 2020 to Aug 2020.”
- 43 Burning Glass Technologies, “Massachusetts Job Postings from January 2020 to August 2020.”
- 44 Ibid.
- 45 Ibid.
- 46 Mass Home Care, “COVID-19 Impact on the Home Care Aide Workforce Survey,” May 2020.
- 47 Leader in Higher Education and Workforce Development and Leader in Nursing and Clinical Placements, Expert Interview.
- 48 Leader in Higher Education and Workforce Development and Leader in Nursing and Clinical Placements.
- 49 Monica Bharel et al., “Order of the Commissioner of Public Health to Waive Timeframe for Certified Nurse Aide Training” (Massachusetts Department of Public Health, May 12, 2020), <https://www.mass.gov/doc/order-re-cna-training/download>.
- 50 Charles D Baker, “Order Authorizing Nursing Practice by Graduates and Senior Students of Nursing Education Programs” (Commonwealth of Massachusetts, April 9, 2020), <https://www.mass.gov/doc/april-9-2020-nursing-school-students/download>.
- 51 Leader in Higher Education and Workforce Development and Leader in Nursing and Clinical Placements, Expert Interview.

- 52 Burning Glass Technologies, “Massachusetts Job Postings from January 2020 to August 2020.”
- 53 Massachusetts Department of Unemployment Assistance, “Permanently Separated Claimants, Jan 2020 to Aug 2020.”
- 54 Olafur S Palsson, Sarah Ballou, and Sarah Gray, “The U.S. National Pandemic Emotional Impact Report,” June 2020, https://www.pandemicimpactreport.com/report/PalssonBallouGray_2020_PandemicImpactReport.pdf.
- 55 Executive in Behavioral Health, Expert Interview, July 9, 2020.
- 56 Leader in Primary Care Innovation, Expert Interview, June 29, 2020.
- 57 Ibid.
- 58 Centers for Medicare and Medicaid Services, “COVID-19 Emergency Declaration Blanket Waivers for Health Care Providers,” December 1, 2020, <https://www.cms.gov/files/document/summary-covid-19-emergency-declaration-waivers.pdf>.
- 59 Ibid.
- 60 Governor Charles D. Baker, “Order Expanding Access to Telehealth Services and to Protect Health Care Providers” (Office of the Governor, Commonwealth of Massachusetts, March 15, 2020), <https://www.mass.gov/doc/march-15-2020-telehealth-order/download>.
- 61 Leader in Primary Care Innovation, Expert Interview.
- 62 Executive in Behavioral Health, Expert Interview.
- 63 “Aspire Health Alliance | Building Hope and Changing Lives Since 1926,” Aspire Health Alliance, accessed September 9, 2021, <https://www.aspirehealthalliance.org/>.
- 64 Ibid.
- 65 Executive in Behavioral Health, Expert Interview.
- 66 “Aspire Health Alliance | Building Hope and Changing Lives Since 1926.”
- 67 Cristina Novoa and Steven Jessen-Howard, “The U.S. Coronavirus Response Must Meet Health Workers’ Child Care Needs,” Center for American Progress, March 24, 2020, <https://www.americanprogress.org/issues/early-childhood/news/2020/03/24/482086/u-s-coronavirus-response-must-meet-health-workers-child-care-needs/>.
- 68 Ibid.
- 69 Economic Policy Institute, “Child Care Costs in the United States,” Economic Policy Institute (blog), accessed December 7, 2020, <https://www.epi.org/child-care-costs-in-the-united-states/>; PHI, “Workforce Data Center: Direct Care Worker Median Annual Earnings, 2018.”
- 70 Neeta Fogg, Paul Harrington, and Nancy Snyder, “Gray Warnings: Challenges in the Direct Care Workforce,” June 2018.
- 71 Mass.gov, “Early Education and Care Financial Assistance for Families,” accessed December 15, 2020, <https://www.mass.gov/guides/early-education-and-care-financial-assistance-for-families>.
- 72 Academic in Urban and Regional Policy, Expert Interview, December 2020.
- 73 Alicia Sasser Modestino, Jamie Ladge, and Alisa Lincoln, “The Importance of Childcare in Reopening the Economy,” July 29, 2020, <https://econofact.org/the-importance-of-childcare-in-reopening-the-economy>.
- 74 Executive Office of Labor and Workforce Development (EOLWD), “What Are the Demographics (Age, Gender, Education, Race or Ethnicity) of Your Local Workforce?”
- 75 Modestino, Ladge, and Lincoln, “The Importance of Childcare in Reopening the Economy.”
- 76 Ibid.
- 77 Mass.gov, “Massachusetts Emergency COVID-19 Child Care: EEC Operations Status Report,” accessed December 7, 2020, https://eeclead.force.com/apex/EEC_ChildCareEmergencyProcedure.
- 78 Andrew W. Artenstein, “In Pursuit of PPE,” *New England Journal of Medicine* 382, no. 18 (April 30, 2020): e46, <https://doi.org/10.1056/NEJMc2010025>.
- 79 Amy W. Baughman et al., “Pandemic Care Through Collaboration: Lessons From a COVID-19 Field Hospital,” *Journal of the American Medical Directors Association* 21, no. 11 (November 2020): 1563–67, <https://doi.org/10.1016/j.jamda.2020.09.003>.
- 80 Mass.gov, “COVID-19 Long Term Care Facility Staffing Team Intake,” accessed December 8, 2020, <https://covid19ltc.umassmed.edu/RCA>.

- 81 Massachusetts Senior Care Association, “Long-Term Care Staffing Portal Offers \$1,000 Sign on Bonus,” April 16, 2020, <https://www.maseniorcare.org/member-resources/e-news-updates/long-term-care-staffing-portal-offers-1000-sign-bonus>.
- 82 Board of Registration in Nursing, “Notice to Nursing Programs: COVID 19 Student Planning,” March 23, 2020, <https://www.mass.gov/news/notice-to-nursing-programs-covid-19-student-planning>.
- 83 Leader in Higher Education and Workforce Development and Leader in Nursing and Clinical Placements, Expert Interview.
- 84 Marylou Sudders et al., “Order Rescinding and Replacing the March 29, 2020 Order of the Commissioner of Public Health Maximizing Health Care Provider Availability,” April 3, 2020.
- 85 Ibid.
- 86 Centers for Medicare and Medicaid Services, “COVID-19 Emergency Declaration Blanket Waivers for Health Care Providers”; Bharel et al., “Order of the Commissioner of Public Health to Waive Timeframe for Certified Nurse Aide Training.”
- 87 Mass.gov, “Make A Difference: Work in Nursing Homes & Long-Term Care Facilities,” accessed December 8, 2020, <https://www.mass.gov/make-a-differencework-in-nursing-homes-long-term-care-facilities>.
- 88 Baker, “Order Authorizing Nursing Practice by Graduates and Senior Students of Nursing Education Programs.”
- 89 Massachusetts Healthcare Collaborative, “Changes to Regulations and Practices for CNA Training Programs During the COVID-19 Pandemic: Frequently Asked Questions,” November 2020.
- 90 Office of Governor Charlie Baker and Lt. Governor Karyn Polito, “Baker-Polito Administration Announces Increased Resources For Health Care Providers, Expanded Support For Long-Term Care Facilities, COVID-19 Testing Initiatives | Mass.Gov,” April 7, 2020, <https://www.mass.gov/news/baker-polito-administration-announces-increased-resources-for-health-care-providers-expanded>.
- 91 Laura Stateler, Molly Kinder, and Julia Du, “The COVID-19 Hazard Continues, but the Hazard Pay Does Not: Why America’s Essential Workers Need a Raise,” Brookings (blog), October 29, 2020, <https://www.brookings.edu/research/the-covid-19-hazard-continues-but-the-hazard-pay-does-not-why-americas-frontline-workers-need-a-raise/>.
- 92 “Bill H.4745: An Act Providing Hazard Pay for Essential Workers in the COVID-19 Emergency,” 2020, <https://malegislature.gov/Bills/191/HD5031>.
- 93 Christopher Gavin, “State Health Care Workers to Receive Hazard Pay during Coronavirus Crisis,” accessed February 9, 2021, <https://www.boston.com/news/local-news/2020/04/13/massachusetts-health-care-workers-hazard-pay-coronavirus>.
- 94 Governor Charles D. Baker, “Order Expanding Access to Telehealth Services and to Protect Health Care Providers.”
- 95 Massachusetts Department of Unemployment Assistance, “Current Employment Statistics, Leisure and Hospitality,” Mass.gov, accessed September 9, 2021, <https://www.mass.gov/orgs/labor-market-information>; Chetty, Friedman, Hendren, Stepner, and the OI Team, “The Economic Tracker,” 2020, <https://tracktherecovery.org/>.
- 96 Leader in Healthcare Workforce and Executive in Healthcare Workforce, Expert Interview, 2021.
- 97 Burning Glass Technologies, “Filling the Lifeboats: Getting Americans Back to Work in the Pandemic,” May 2020, https://www.burning-glass.com/wp-content/uploads/2020/05/Lifeboat_Jobs_Burning_Glass.pdf.
- 98 The Washington Post, “July 6-21, 2021, Washington Post-Schar School National and D.C. Region Poll,” Washington Post, accessed September 13, 2021, <https://www.washingtonpost.com/context/july-6-21-2021-washington-post-schar-school-national-poll/15fb6baa-2794-4065-9933-7f47dd093570/>.
- 99 Iris Palmer, “We Need to Fix the Broken Nursing Career Pathway—Here’s How,” New America, accessed September 13, 2021, <http://newamerica.org/education-policy/edcentral/we-need-to-fix-the-broken-nursing-career-pathwayheres-how/>.
- 100 Leader in Healthcare Workforce and Executive in Healthcare Workforce, Expert Interview; Carlos Carrillo-Tudela et al., “Career Changes Decline during Recessions,” 2014, <https://www.frbsf.org/economic-research/files/el2014-09.pdf>.

