AARC Human Resource Survey of Respiratory Therapists



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December 2020

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SUMMARIES

While the body of this report contains useful details, this section of the report is intended to summarize results and compare some results to past studies.

Limitations of Study Results

Although the sampling effort for this study was ample with 156,512 direct solicitations supplemented by additional snowball sampling, it remained possible that the observed responses were biased in one way or another. For example, we are confident in saying that four groups were oversampled – AARC members, Directors of respiratory care from acute care hospitals, therapists who primarily worked in education settings, and certified asthma educators.

Continuing the discussion about potential sample bias, we observed a population estimate of 191,457 but the size of the sample was 11,516, which was only about 6% of the population. There were many more who chose not to respond to the survey than did respond, which means that non-response bias remained as a possibility that could have influenced study results.

Population of Licensed Therapists

The population of therapists has grown by 18,536 over the last six years to 191,457. A key point about these numbers is that they are based on the sum of counts kept by state licensing agencies except for Alaska. Counts from Alaska were estimates, so we will characterize the population count as an estimate. A small number of therapists were licensed in more than one state and so were counted twice. While this should urge caution about claiming that there are 191 thousand working therapists, one can be confident about claiming that the population of licensed therapists grew by at least 10% in six years.

Geographic Characteristics

Each state within the United States plus Washington DC, Puerto Rico, Guam, and the Northern Marianas islands were represented in the sample. We tended to observe the largest numbers of responses from those states that had large general populations and large populations of respiratory therapists. The South region yielded the largest number of responses followed by the Midwest, West, and then the Northeast regions of the United States.

Ages of Therapists and their Departure from the Workforce

The mean and median age of this sample was 46, which was almost the same six years ago when the median was 46 and the mean was 45. A histogram of the age distribution showed that comparatively few therapists were in the sample beyond the age of 66. Our analyses of respondents' plans to depart the respiratory therapy workforce found that half of the sample expect to be out by the year 2032, which is five years further out than observed in the previous study.

Experience Level of Therapists

The typical respondent in this sample had a total of 15 (median) or 18 (mean) years of experience in respiratory therapy since professional training had been completed. The median value for the number of years respondents had worked for their current primary employer was six years, so changing employers was normal within this sample.

Primary Job Venues of Therapists

A majority (78.5%) of respondents indicated working their primary job in an Acute Care hospital which was an increase from 2014 when 75.9% worked in a hospital. The remaining venues for primary position were Long Term Care (8.5%), Education (6.3%), DME/Home Care (6.1%), Outpatient Facility (4.8%), Physician's Office (2.4%), Non-Profit Association (2.2%), Registry (1.2%), and Manufacturing/Distribution (1.0%). Except for acute care hospitals, the percentage of therapists who worked primarily in each venue remained within 1

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percentage point of the 2014 results. The percentage of therapists working primarily in each setting exceeds 100% due to individuals who specified working primary jobs in multiple settings.

Base Wage at Primary Job, Differential Pay, Bonuses, and Raises

The mean wage value was \$33.56/hour in 2019 (up from \$29.59/hour in 2013). However, we encourage readers toward the multiple regression analyses of total compensation at the end of the report for a more nuanced look at compensation. As the name of the statistical model implies, the results account for the unique influence of several variables on total compensation so it is the most valuable benchmark this study can offer.

Median values for compensation differentials in 2019 were as follows:

- \$2.05/hour for evening shifts
- \$3.00/hour for night shifts
- \$2.50/hour for weekends
- \$15.00/hour for holidays
- \$2.50/hour for on-call

Only 19% of respondents had received a bonus. The median value for a bonus was \$800 while the mean value was \$2,482.

The median value for the last raise received by sample members was 2.5% while the mean was 2.7%. A raise of more than 5% was rare.

Job Satisfaction

About 17% of therapists in this sample rated satisfaction with their jobs on the lower half of the 0 to 5-point scale. Typical responses fell between 3.6 (the mean) and 4 (the median).

Of those who responded, 30% indicated that compensation and benefits was an area that decreased their satisfaction. **Department administration/supervision** was cited by about 21%.

Among the 35% of therapists who had changed jobs within the last five years, department administration/ supervision was the most frequently cited reason for the change, followed closely by 23% who indicated compensation and benefits, and 22% who relocated.

Job Titles

The largest subgroup (47.9%) of the sample were therapists working with the Staff Therapist job title. Although therapists working under this job title are likely a larger percentage of the population than this study had projected.

Credentials and Certifications

Credential maintenance has become a potential issue for some therapists since the NBRC implemented a credential maintenance program in 2002. Before that point, therapists earned credentials for a lifetime. The NBRC will periodically renew a therapist's credential for another five years once sufficient evidence of maintained competency is provided.

Among those who responded to a question about credential maintenance, 78% indicated that their employers did require that an employee maintain an active credential with the NBRC. Twenty-three percent (23%) of the sample did not respond to this question, which is nearly identical to the 22% of the sample who did not respond to this question six years ago.

Eighty-three percent (83%) of the sample reported that they had achieved the RRT credential compared to 80% in 2014 and 85% in 2009. Fourteen percent (14%) of the sample had achieved the CRT-NPS or RRT-NPS credential. Nine percent (9%) of the sample had achieved a credential in pulmonary function testing.

BCLS certification was almost universal in this sample with 96% of therapists giving an affirmative response. Just over 80% indicated that they were ACLS certified. Fifty-six percent (56%) of the sample had earned NRP certification while 59% had earned PALS certification.

Characteristics of Respiratory Therapy Training or Education

Nearly three quarters of the therapists who responded to this question had received formal education in respiratory therapy that made them eligible to achieve the RRT credential. Those who had received CRT-level education or on-the-job training respectively constituted 11% and 15% of the sample.

Degree Earned from Respiratory Therapy Program

More than a quarter of this sample gave no response to this question. Among sample members who did respond, 82% had earned an associate degree compared to 81% six years ago while 17% had earned a bachelor's degree at the point that they completed their professional training compared to 18% six years ago. The remaining 1% had earned a master's degree in 2020.

Highest Academic Level

Some therapists came to respiratory therapy with college degrees in-hand. Others sought degrees after they had completed their respiratory therapy education program. The survey asked for respondents' highest academic levels as a separate question from the one about the degree from the respiratory therapy program.

Just less than one quarter of the sample left this item without a response. Among those who did respond, 51% had completed an associate degree and 32% had earned a bachelor's degree. Again, 17% of respondents started with a bachelor's degree from their respiratory therapy program although a few could have had a bachelor's degree before starting their program. Eleven percent (11%) had completed a master's degree and 1% had completed a doctorate degree.

A follow-up question asked respondents whether they had completed a bachelor's or graduate degree in a health-related field. A quarter gave an affirmative response compared to 22% six years ago. About half of this group cited respiratory therapy as their area of study. The remaining respondents either did not respond (23%) or selected the negative (52%) response.

Seventeen percent (17%) of therapists in this sample indicated that they were pursuing a higher academic degree than the one they had earned compared to 19% six years ago. Within this group, 62% indicated that they were doing so to advance their career in respiratory care. Almost 40% indicated that they intended to change their career, which we interpreted to imply that they had plans to leave the respiratory therapy workforce. We estimated that this represented a population of 12,336 people with plans to leave over the next few years.

Sixty percent (60%) of the therapists who responded in 2020 worked for an employer that offered tuition reimbursement/forgiveness/discount. Encouraging more employers to offer this benefit could only help encourage attainment of higher academic levels in the future.

Number of Patients Receiving Mechanical Ventilation Assigned to Each Therapist

Mean and median values were both 6 while the range of responses started at 1 patient per therapist and went up to 25. The mean, median, and range of responses is the same as it was six years ago.

Percentage of Time in Different Hospital Areas

Therapists spent 37% of their time in adult intensive care units in 2020, which was 3% more than six years ago. The next highest (20%) area was the general medical and surgical floors, which decreased 5% from six years ago. The emergency department garnered 15% of therapists' time. The two areas related to the care of children, the Neonatal ICU (10%) and the Pediatric ICU (5%), came next. The areas that received the lowest percentages of time in this sample were other departments (5%), the Pulmonary Function Lab (4%), Pulmonary Rehabilitation (2%) and Telemedicine/Telehealth (1%). There were individual therapists who specified spending from 0% to 100% of their time working in each department.

Percentage of Care by Disease/Disorders

Patients with COPD were cited as the largest average percentage of time (40%) from therapists in this sample. Those who fell into the Other category were next with an average of 18% of time. Both of these proportions were the same as six years ago.

Patients with asthma and those with other chronic pulmonary problems followed, each consuming an average of 16% of therapists' time. Lastly, patients with sleep disorders occupied an average of 10% of the time of therapists in this sample. Again, there were individual therapists who specified spending from 0% to 100% of their time working with each population.

Some Employers Required Simultaneous Care to be Provided to Multiple Patients

There has been a decrease in this activity over a decade since 28% of the sample gave an affirmative response this time, which was down from 31% in 2014 and 48% in 2009. The remainder of the sample gave no response (38%) or gave a negative response (34%).

Uncompleted Work Assignments During Recent Shifts

There has been no change in this activity over a decade since there was a median value of 10% in 2020 compared to 10% in 2014 and 10% in 2009.

Employer Provided Work Prioritization System

Just less than a third of the sample gave an affirmative response in 2020, while there were 39% such responses in 2014. When asked how often they used the prioritization system, 21% indicated that they use the system every day compared to 26% in 2014, 3% used the system once a week, 2% used it once a month, and 6% used it less than once a month.

Respiratory Care Delivery by Protocol

More than two thirds of those who responded to the question indicated that some respiratory care was affected by protocols where they worked. This proportion is 15% higher than it was six years ago.

Kind of Shift

Nearly 30% of respondents skipped this question, which could have meant that they did not work in shifts or they decided to withhold a response. Among those who did respond, 45% were 12-hour shifts followed by 16% who worked 8-hour shifts. A few respondents worked 10-hour, rotating, and other shifts. Six years ago, 12-hour shifts were also dominant.

Vaccinations

Compared to the percentage (65%) of therapists in the sample who had received an Influenza vaccination in the last year, 13% had received the Pneumococcal vaccination. The rate of Influenza vaccinations is about 2 percentage points lower than in 2014 while the percentage of Pneumococcal vaccinations was 8 points lower than 2014.

Nicotine Use Behaviors

Only 1% of the sample indicated ever using an Electronic Nicotine Delivery System (ENDS). Eighteen percent of the sample indicated that they had smoked at least 100 cigarettes in their lifetimes, which was down from 25% in 2014 and 38% in 2009. Among therapists who responded to the question, 47% had never tried nicotine. Slightly less than half of the sample had experimented with nicotine or had used nicotine but had quit. About 7% of therapists in the sample still used tobacco, which was 1% less than in 2014.

COVID Response

Around 6% of the sample indicated being furloughed during the COVID pandemic. Less than 20% of those who had been impacted by COVID-related furloughs were currently out of work when responding to the survey. Most furloughed respondents returned to work after less than one month.

Approximately 5% of the sample traveled to a COVID hot spot to provide respiratory care. The average amount of time spent at a COVID hot spot was 12 weeks. The most frequently cited hot spot locations were California, New York, and Texas. It should be noted here that these responses were collected before the increases in COVID cases in the fall and winter of 2020.

Gender

Thirty percent of the sample either did not respond to this question or indicated that they preferred not to say. Among those who did respond, 70% were female, which was an increase from the 67% observed in 2014. There seems to be a trend toward more females within the profession. A tiny percentage (.2%) of the sample identified as transgender in 2020, which was the first opportunity they had to be recognized by this survey.

Race and Ethnicity

The majority (64%) of this sample came from the non-Hispanic group and the largest racial group was White (82% of cases). Black/African Americans comprised 10% of the sample. Having deployed more options for respondents from minority groups to choose permitted a more detailed description of therapists in 2020.

AARC Membership

Forty-three percent (43%) of the sample gave an affirmative response about being a member of the AARC. This was down from slightly from 45% six years ago.

Compensation Factors

Multiple regression and ANCOVA elements explained about one-quarter of variability in the total compensation of therapists who submitted responses. This was slightly less than what was reported in the last study but unsurprising given the smaller sample size.

We illustrated two compensation scenarios to demonstrate how the results of our analyses could be used by workers and employers. We encourage therapists and their employers who seek a benchmark for local compensation to use the spreadsheet file that will be provided with this report to run their own scenarios.

Introduction

The American Association for Respiratory Care (AARC) is the professional membership organization for respiratory therapists and has periodically conducted human resource studies of therapists and institutions that employ therapists. The intent behind this arm of the study was to gather information from individual therapists. The AARC prepared and made available a survey with the intent that individuals who were respiratory therapists would respond. Opportunities to respond to the survey were sent to the sample unsolicited by potential respondents who chose whether to respond.

The report that follows contains several statistical summaries. A brief guide to interpretation of these analyses is provided. The Results section follows the order of questions as presented in the survey. Where applicable, the specific survey question that pertained to the analysis is listed with the research question. The survey question is listed in bold type. The survey document is presented in Appendix A.

METHODS

A survey of the same scope of this population was last completed in 2014. The instrument from that study was the starting point for development of an instrument for this study. AARC executive office staff and board members revised and added items to the 2020 survey. Text of the survey document is shown in Appendix A. Respondents submitted their responses to survey questions through the Internet from a secure server.

Survey sampling came from populations of (1) credentialed therapists, (2) education programs and (3) acute care hospitals. Table 1 summarizes the population numbers. All three populations were left intact for this study, so each member of those groups had an opportunity to respond to the therapist survey.

Emails were distributed to the therapist and education cohorts. Postcards were mailed to the acute care hospitals. Images of email and postcard messaging plus the social media advertising are shown in Appendix B. All invitations encouraged a snowball sampling technique in which respondents were asked to encourage others to respond to the survey for individual therapists. Five thousand nine hundred fifty-one (5,951) emails were returned as undeliverable, 77 individuals elected to 'Opt Out' of responding (e.g., retired, unemployed, not working in respiratory care), and 2 emails did not reach the recipients because they had been temporarily furloughed. Three (3) postcards were returned with a request to be removed from the mailing list.

Table 1. Population Numbers

Cohort	Population N
Credentialed therapists in the NBRC database with valid email address	151,173
CoARC accredited education programs	408
Acute care hospitals with 25 beds or more	4,931
Total solicited	156,512

Other therapists were permitted to respond. They learned about the survey from information posted to the AARC website and emails distributed by the AARC. The addition of responses from therapists who were not directly solicited made it impossible to calculate a response rate.

Each study participant was limited to submitting a single set of responses. The survey was available between September 1 and October 11, 2020.

The first survey question asked each respondent for his or her zip code. Using the zip code information from the survey, respondents were classified by census divisions and regions. These classifications were used for subsequent analyses in the report.

Through a combination of direct counts of the populations of license-holders from each state and proportions observed in results of this study, some projections have been estimated. We talked about study limitations in the Summaries section of this report, but it is worth highlighting again that these projections are only as good as the degree to which there was little or no sampling bias. Each instance in which there is a strong suspicion of sampling bias will be described as it is encountered in the body of the report.

Responses are summarized in the Results section of this report. The IBM SPSS Statistics Subscription version 1.0.0.1406 software package was used to analyze survey responses for this study.

RESULTS

General Descriptions

There were 11,516 therapists who submitted survey responses. Frequency results that are shown in Appendix C (<u>Table 44</u>) had two inputs. In October 2020, AARC staff solicited counts of licensed or registered therapists from state regulatory authorities. An AARC chapter representative from Alaska, a state that did not regulate respiratory therapy practice, estimated the therapist count since there was no regulatory authority. Except for Alaska, the count of therapists licensed among the states was 191,457. While using the same method in 2014, the count was 172,921, so the count of licensed therapists has increased by 18,536 over six years.



Figure 1. Choropleth of Active Therapists by State

Responses were combined into four regions so we could analyze variables by geography. Results are shown in Figure 2 and Appendix C (*Table 45*).



Figure 2. Distribution by region

Northeast – MA, RI, NH, ME, VT, CT, NJ, NY, PA South – DC, DE, MD, VA, WV, NC, SC, GA, FL, AL, TN, MS, KY, LA, AR, OK, TX Midwest – OH, IN, MI, WI, IL, IA, MN, SD, ND, MO, KS, NE West – MT, CO, WY, ID, UT, AZ, NM, NV, CA, HI, OR, WA, AK Survey responses were recompiled into the divisions shown in Figure and in Appendix C (<u>Table 46</u>) to coincide with groups defined by the United States census.



Figure 3. Distribution by division

1 – ME, VT, NH, MA, RI, CT 2 – NY, PA, NJ 3 – WV, VA, MD, DC, DE, NC, SC, GA, FL 4 – MI, OH, IN, IL, WI 5 – ND, SD, MN, NE, IA, KS, MO 6 – KY, TN, MS, AL 7 – OK, AR, LA, TX 8 – MT, ID, WY, NV, UT, CO, AZ, NM 9 – WA, OR, CA, AK, HI

Response Distributions

Survey questions are shown in bold type and research questions follow.

1. What is your age in years?

The typical survey respondent was a respiratory therapist who was 46 years old based on mean and median values. To the extent one is willing to generalize observations from this sample to the population, *Figure 4* shows that respiratory therapists span the generations of people who work within the United States while tending to retire when in their 60s.

Table 2. Age of respondents in years





Figure 4. Age of respondents in years

2. For how many years have you practiced as a respiratory therapist since completing your training?

Figure 5 shows that the largest subgroup had about ten years of experience, so ten years is one way to describe what was typical. However, a mean value of 17.7 and a median value of 15 also describe typical experience levels.

Table 3. Years respondents have practiced since completing training

N		N Std. Error of Std		Std.			
Valid	Missing	Mean	Mean	Median	Deviation	Minimum	Maximum
11,427	89	17.73	.120	15	12.86	0	55



Figure 5. Years respondents have practiced since completing training

3. Which of the following best describes your military status?

As shown in Figure 6, about 9% of therapists have served or are serving in the military, which is a bit higher than the 7% of the United States population who have served (https://www.census.gov/library/publications/2020/demo/acs-43.html).



Figure 6. Military status

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4. How many years have you worked for your primary employer?

Indicators of typical responses were expressed in a median value of 7 and a mean value of 11. Something else we noted was that the 10-, 20-, 30-, and 40-year points tended to be associated with upward spikes in the numbers. We infer from this behavior that some respondents expressed estimates.



1	N		Std. Error of		Std.		
Valid	Missing	Mean	Mean	Median	Deviation	Minimum	Maximum
11,405	111	10.93	.099	7	10.54	0	65



Figure 7. Years worked for Primary employer

5. What is your best guess about the year you will leave the respiratory therapy workforce?

The largest subgroup (11.2%) within this sample identified 2030 as the year they planned to leave the workforce of respiratory therapists. The year 2032 was the median point, which indicates that one-half of the sample intended to leave the workforce about 12 years into the future.

We suggest that the cumulative frequency column in <u>Table 47</u> in Appendix C is helpful in making predictions and planning for the movement of individuals out of the workforce. We produced one set of predictions, which are listed in the column labeled "Projected." We calculated these numbers by multiplying the cumulative percent value by the 2020 population number, which was 191,457. For example, we learned to expect that about 92,474 from the current population of therapists will have left the workforce by the end of the year 2030.

Something else we noted was that the 5-, 10- and 15-year points tended to be associated with upward spikes in the numbers. We infer from this behavior that some respondents expressed estimates.



Table 5. Descriptive statistics for year of intended departure from respiratory therapy workforce



Figure 8. Year of intended departure from respiratory therapist workforce

6. How many hours do you work in a typical week for the following employers?

Data from 55 respondents were excluded from analysis after indicating implausibly high hours worked across multiple venues. Individuals who specified working more than 96 hours each week were removed. Ninety-six (96) represented a breakpoint in the data that still included 99.5% of the submitted responses. The percentage of therapists working primarily in each setting exceeds 100% due to individuals who specified working primary jobs in multiple settings.

Acute Care Hospital

Almost 79% of therapists in this sample worked in their primary job at an acute care hospital, which extrapolated to a population of 150,294 people.

Among therapists whose primary job was in an acute care hospital, they typically worked for 35 to 36 hours per week (Appendix C <u>Table 48</u>). Those who had second jobs worked an average of 13 hours a week in acute care hospitals. We noted that among those who worked a second job, at least a few were putting in full-time hours. However, over three-quarters of this group worked 12 hours or less, so that was a more typical scenario for second jobs.

Table 6	Hours worked	per week at	iobs at Acute	e Care Hospital
Table 0.	nours worked	perweenal	<i>jobs αι πουι</i> ί	

N			Std. Error		Std.			
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Acute care hospital - Primary	8,298	2,270	34.84	.123	36	11.23	1	65
Acute care hospital - Secondary	1,024	9,544	13.39	.249	12	7.96	1	48



Figure 9. Hours worked per week at Primary job in Acute Care Hospital

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Figure 10. Hours worked per week at Second job in Acute Care Hospital

DME/Home Care

Approximately 6% of the sample worked in the Durable Medical Equipment/Home Care setting as their primary job. This extrapolated to a population of 11,679.

When a respondent's primary job was in a DME/Home Care setting, typical therapists who worked full time put in approximately 40 hours per week. Like we saw in the group who worked primarily in the acute care setting, the typical therapist working a second job in the DME/Home Care setting put in 12 hours or less, but a few worked a full 40 hours in their second job. Frequency tables can be found in Appendix C, <u>50</u> and <u>51</u>.

Table 7. Hours	worked p	per week in	n DME/Home	Care
----------------	----------	-------------	------------	------

		N		Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
DME/Home care - Primary	641	9,927	31.03	.652	40	16.50	1	65
DME/Home care - Secondary	143	10,425	8.60	.775	5	9.27	1	55



Figure 11. Hours worked per week at Primary job in DME/Home Care



Figure 12. Hours worked per week at Second job in DME/Home Care

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Long Term Care

Slightly less than 9% of the sample worked in Long Term Care/Rehabilitation/Skilled Nursing Facilities settings for their primary job. We extrapolated a population of 16,274 from this percentage of the sample.

Average values for work hours among therapists in the Long-Term Care/Rehabilitation/Skilled Nursing Facility settings were between 28 and 36 hours. When therapists held a second job in one of these settings, they tended to work approximately 12 hours. Frequency tables can be found in Appendix C, <u>Table 52</u> and <u>Table 53</u>.

Table 8. Hours worked per week in Long Term Care

	N		Std. Error			Std.	Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum	
Long Term Care/ Rehab/SNF - Primary	899	9,669	28.36	.511	36	15.33	1	65	
Long Term Care/ Rehab/SNF - Secondary	254	10,314	13.36	.527	12	8.40	1	48	



Figure 13. Hours worked per week at Primary job in Long Term Care



Figure 14. Hours worked per week at Second job in Long Term Care

Education

Slightly more than 6% of the sample worked primarily in the education setting. We extrapolated a population of 12,062 from this percentage of the sample. However, we were reminded that there were 448 accredited programs and program options according to the 2019 CoARC Report on Accreditation. There would have to be 27 employees per program to reach more than 12,000 people. Therefore, this result revealed that people who primarily worked for education programs were overrepresented in this sample.

Therapists who worked in education settings as their primary job tended to put in around 25 hours per week according to the mean value in Table 19. However, the modal point in Figure 17 was 40 hours. These results indicate that some educators put in 40 hours a week at their primary jobs while others work less than 40 hours a week. When therapists worked second jobs in the education setting, they typically put in 8 to 9 hours. Although Table 24 showed that several of those who worked second jobs in education put in 4, 8, and 12 hours per week. Frequency tables can be found in Appendix C, <u>Table 54</u> and <u>Table 55</u>.

Table 9.	Hours	worked	per	week	in	Education
----------	-------	--------	-----	------	----	-----------

	N			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Education program - Primary	668	9,900	24.64	.692	25	17.90	1	65
Education program - Secondary	209	10,359	8.78	.444	8	6.41	1	40



Figure 15. Hours worked per week at Primary job in Education



Figure 16. Hours worked per week at Second job in Education

Manufacturing/Distribution

Only 1% of the sample worked primarily in this setting, which extrapolated to a population of 1,915. The few therapists who worked in the Manufacturing/Distribution setting tended to put in 29 to 40 hours. Those with second jobs in this setting were typically limited to 4 to 7 hours. Frequency tables can be found in Appendix C, <u>Table 56</u> and <u>Table 57</u>.

Table 10. Hours worked per week in Manufacturing/Distribution

	Ν			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Manufacturer - Primary	111	10,457	28.95	1.952	40	20.56	1	65
Manufacturer - Secondary	30	10,538	7.33	1.712	4	9.38	1	40



Figure 17. Hours worked per week at Primary job in Manufacturing/Distribution



Figure 18. Hours worked per week at Second job in Manufacturing/Distribution

Non-profit Association

Slightly more than 2% of the sample worked primarily for a non-profit association, which extrapolated to a population of 4,212. AARC executive office staff thought this was much higher than expected. Perhaps this group was oversampled or respondents misread the question to mean non-profit hospital. The therapists who worked for a non-profit association as their primary job tended to work between 26 and 36 hours per week. Those who worked at a secondary non-profit job worked between 5 and 7 hours. Frequency tables can be found in Appendix C, <u>Table 58</u> and <u>Table 59</u>.

	Ν		Std. Error		Std.			
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Non-profit association - Primary	232	10,336	26.39	1.102	36	16.79	1	65
Non-profit association - Secondary	47	10,521	7.06	.896	5	6.15	1	25



Figure 19. Hours worked per week at Primary job for Non-profit association



Figure 20. Hours worked per week at Second job for Non-profit association

Outpatient Facility

About 4.8% of the sample worked primarily in this setting, which extrapolated to a population of 9,190.

Among therapists whose primary job was in an outpatient facility, they typically put in 28 to 36 hours each week. Those working a second job in this setting tended to work 8 to 10 hours each week. Frequency tables can be found in Appendix C, <u>Table 60</u> and <u>Table 61</u>.

Table 12. Hours worked per week in an Outpatient facility

	N			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Outpatient facility - Primary	511	10,057	28.06	.651	36	14.71	1	65
Outpatient facility - Secondary	52	10,516	9.54	.790	8	5.70	1	24



Figure 21. Hours worked per week at Primary job in an Outpatient facility



Figure 22. Hours worked per week at Second job in an Outpatient facility

Physician's Office

About 2.4% of the sample worked primarily in this setting, which extrapolated to a population of 4,595.

Among therapists whose primary job was in a physician's office, they typically put in 27 to 32 hours each week. However, the modal point was 40 hours per week. Those working a second job in this setting tended to work 8 to 9 hours. Frequency tables can be found in Appendix C, <u>Table 62</u> and <u>Table 63</u>.

Table 15. Hours worked per week in a Filysician's onice

	N			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Physician's office - Primary	256	10,312	27.15	.988	32	15.81	1	65
Physician's office - Secondary	37	10,531	8.70	1.106	8	6.73	1	25



Figure 23. Hours worked per week at Primary job in a Physician's office



Figure 24. Hours worked per week at Second job in a Physician's office

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Registry Providing Temporary Employees

Approximately 1.2% of the sample worked primarily for a registry service. We extrapolated a population of 2,297 therapists based on this percentage.

Among those whose primary job was in this setting, they typically put in 25 to 34 hours each week. Therapists working a second job in this setting typically put in one shift a week. Frequency tables can be found in Appendix C, <u>Table 64</u> and <u>Table 65</u>.

Table 14. Hours worked per week for a Registry

	N			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Registry – Primary	126	10,442	24.97	1.614	34	18.11	1	65
Registry - Secondary	52	10,516	12.94	1.769	10	12.76	1	50



Figure 25. Hours worked per week at Primary job for a Registry



Figure 26. Hours worked per week at Second job for a Registry

Table 1	5. Descr	iptive stat	istics for	hours	worked	per v	week fo	r all e	employers
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	N			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Acute care hospital - Primary	8,298	2,270	34.84	.123	36	11.23	1	65
Acute care hospital - Secondary	1,024	9,544	13.39	.249	12	7.96	1	48
DME/Home care - Primary	641	9,927	31.03	.652	40	16.50	1	65
DME/Home care - Secondary	143	10,425	8.60	.775	5	9.27	1	55
Long Term Care/Rehab/SNF - Primary	899	9,669	28.36	.511	36	15.33	1	65
Long Term Care/Rehab/SNF - Secondary	254	10,314	13.36	.527	12	8.40	1	48
Education program - Primary	668	9,900	24.64	.692	25	17.90	1	65
Education program - Secondary	209	10,359	8.78	.444	8	6.41	1	40
		N		Std. Error		Std.		
--	-------	---------	-------	------------	--------	-----------	---------	---------
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Manufacturer - Primary	111	10,457	28.95	1.952	40	20.56	1	65
Manufacturer - Secondary	30	10,538	7.33	1.712	4	9.38	1	40
Non-profit association - Primary	232	10336	26.39	1.102	36	16.79	1	65
Non-profit association - Secondary	47	10,521	7.06	.896	5	6.15	1	25
Outpatient facility - Primary	511	10,057	28.06	.651	36	14.71	1	65
Outpatient facility - Secondary	52	10,516	9.54	.790	8	5.70	1	24
Physician's office - Primary	256	10,312	27.15	.988	32	15.808	1	65
Physician's office - Secondary	37	10,531	8.70	1.106	8	6.73	1	25
Registry - Primary	126	10,442	24.97	1.614	34	18.11	1	65
Registry - Secondary	52	10,516	12.94	1.769	10	12.76	1	50

7. What is your hourly base wage at your primary job?

The typical respondent earned an hourly base (before differentials for evening and night shifts, weekends, holidays, and on-call) wage of \$33.56 (Table 16). However, one-half of this sample earned less than \$31.66/hour. Approximately 68% of the sample earned between \$23.48/hour and \$43.64/hour, a range defined by one standard deviation above and below the mean.

Because the shape of the histogram in *Figure 27* indicates that the extreme values are on the upper end of the range, we recommend that the median value is a truer indicator of typical base wage than the mean in Table 16.

Table 16. Descriptive statistics for hourly base wage at Primary job

1	N		Std. Error of		Std.		
Valid	Missing	Mean	Mean	Median	Deviation	Minimum	Maximum
9,056	2,460	33.56	.11	31.66	10.08	10	99



Figure 27. Hourly base wage at Primary job

8. Please specify the additional \$ per hour differentials earned at your primary job.

There were some settings where therapists worked in which they did not earn a wage differential. We inferred this from the minimum values of zero shown in Table 17. Because the sample included therapists working in some settings that did not require around-the-clock services, this was expected. Therapists in this sample who worked the evening shift typically earned an additional \$2.05 to \$2.91/hour, while those who worked the night shift typically earned an additional \$3.00 to \$3.92/hour as Table 17 showed. Those working on the weekend typically earned an additional \$2.50 to \$3.69/hour.

Stronger variability was observed in the differential for holiday and on-call work. On-call differential also showed a lot of variability with a range for the typical therapist between \$2.50 and \$8.01/hour. Holiday differentials showed the greatest variability ranging between \$15.00 and \$22.25 for the typical therapist in this sample.

	N			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Evening shift	2,692	8,824	2.91	.091	2.05	4.73	0	69
Night shift	3,741	7,775	3.92	.086	3.00	5.25	0	91
Weekend	3,596	7,920	3.69	.096	2.50	5.75	0	100
Holiday	2,131	9,385	22.25	.458	15.00	21.14	0	100
On-call	1,669	9,847	8.01	.355	2.50	14.49	0	100

Table 17. Descriptive statistics for differentials



Figure 28. Hourly Evening shift differential



Figure 29. Hourly Night shift differential

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Weekend Shift Differential





Figure 31. Hourly Holiday shift differential



Figure 32. Hourly On-call shift differential

9. If you received a bonus last year, what was the amount?

The first thing to understand about bonus compensation was that only 19% of respondents received a bonus. Among those who did, the mean was \$2,482 and the median was \$800 as Table 18 showed.

Table 18. Descriptive statistics for most recent bonus amount

1	N Std. Error of		Std.				
Valid	Missing	Mean	Mean	Median	Deviation	Minimum	Maximum
2,245	9,271	2,481.54	132.29	800	6,268.20	1	100,000



Figure 33. Bonus Received Last Year

10. What do you estimate to be the total wages you earned in 2019?

Typical responses are summarized in Table 19. Detailed analyses of 2019 compensation will follow later in this report.

Table 19.	Descriptive	statistics for	or estimated	compensation	from .	Primary	and S	Second j	iobs in	2019
				/						

		N		Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
2019 Wages - Primary	8,400	3,116	67,765.59	674.70	60,000	61,836.97	1	1,250,003*
2019 Wages – Secondary	1,487	10,029	17,990.04	939.88	12,000	36,243.23	1	700,000**

*Nine values that exceeded \$1.25 million were excluded from analysis because they were so far removed from the response distribution.

** One value that exceeded \$1 million was excluded from analysis.

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Figure 35. Estimated compensation from Second job in 2019

11. By what percentage was your base wage increased when you last received a raise for your current position?

Most respondents' last raises were between 2.5% and 2.75%. Just less than 800 (n=778) respondents were excluded from this analysis after submitting a value of zero.

1	N		Std. Error of		Std.		
Valid	Missing	Mean	Mean	Median	Deviation	Minimum	Maximum
6,707	4,809	2.74	.028	2.50	2.33	.01	25.00



Figure 36. Percentage increase of last raise

12. Using the following scale (0 – Unsatisfied, 5 – Completely Satisfied), please indicate your satisfaction with your primary job.

We first noted that one-quarter (3,146) of the sample did not respond to this question (Table 21). A median value of 4 and mean of 3.58 indicated that the typical therapist who did respond was satisfied with his or her job. About 21% of the sample indicated that they were completely satisfied.

Among those who responded to this question, 16.8% were on the lower half (0, 1, or 2) of the satisfaction scale (Appendix C, <u>Table 66</u>). Conversely, 83.2% were more satisfied than dissatisfied having given responses of 3, 4, or 5).

Table 2	1. D	Descriptive	statistics	for iob	satisfaction

1	N		Std. Error of		Std.		
Valid	Missing	Mean	Mean	Median	Deviation	Minimum	Maximum
8,370	3,146	3.58	.015	4	1.36	0	5



Figure 37. Job satisfaction

13. With which of the following are you LEAST satisfied with your primary job?

While the typical therapist in the sample was well satisfied with his or her job, the element about which his or her satisfaction was lowest was in the area of **compensation and benefits** (*Figure 38*). According to Appendix C <u>Table 67</u> one-quarter of respondents chose not to respond to this question. **Department administration or supervision** followed as the second strongest negative effect on satisfaction.



Figure 38. Area of lowest job satisfaction

14. If you have changed employers within the last five years, what was the strongest reason? Copyright © 2020. AARC. All Rights Reserved.

We first noted that less than 35% of these therapists had changed employers in the last five years. Among those who did change jobs, the issue cited most often was **department administration/supervision** (Appendix C <u>Table 68</u>). A close second was related to **compensation and benefits** followed by **relocation**.



Figure 39. Strongest reason for employment change

15. Which of the following is *closest* to the title for your primary job?

An option was provided for survey respondents to type an 'Other' job title that was not included among the list of other choices. On review of the free responses, two conclusions were reached; 1) there were several similar responses which prompted the addition of three categories (ECMO/ECLS Specialist, Cardiac/Pulmonary Rehabilitation Specialist, Flight/Transport Therapist) and 2) many individuals wrote in 'Other' responses that belonged among the provided options. AARC and NBRC staff reviewed and recategorized such responses to fit within the existing job title options.

While the Staff Therapist job title described the largest subgroup in the survey sample in Figure 40 and Appendix C <u>Table 69</u>, there was oversampling of therapists from other job titles. As a result, the population projection for the Staff Therapist/Technician group was probably low. Those who indicated they occupied Manager, Director, Instructor, or Educator positions particularly stood out as oversampled.

Technical directors of respiratory therapy in 4,934 acute care hospitals were directly solicited with a postcard. Even allowing that directors of departments from other hospitals could have become aware of the study and responded to this survey, we know that at most there were about 6,000 hospitals of any type in the American Hospital Association database. Projecting a population of more than 11,000 Director level therapists would have meant that there were two directors in each hospital. Results of the acute care hospital study showed that there was typically just one director of respiratory therapy, which is why we are confident about the oversampling assertion.

There were 407 accredited entry-to practice education programs. We sent an email to each program director. Even though they were encouraged to direct instructors from their programs to respond to the therapist

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survey, observing a population projection of 3,275 would mean that there were more than 8 faculty per program. Results of the education program study indicated that the typical number of education staff was far fewer than 8 per program. In fact, some programs operate with only a program director and director of clinical education, so educators were oversampled.

These were important characteristics for us to manage for other analyses in this study, particularly those related to compensation. We want to emphasize that we included projected populations in <u>Table 69</u> in Appendix C to illustrate evidence of oversampling, not to assert that these were accurate representations of the sizes of these populations. We suggest that more accurate information will be found in the reports about acute care hospitals and education programs.





16. Does the employer for your primary job require that you maintain an NBRC credential as a condition for employment?

The number of missing responses was notable in Appendix C <u>Table 70</u> and *Figure 41*. Some respondents may have skipped this question because they were uncertain about whether credential maintenance was required by their employers. Other respondents may have withheld a response because the answer was really "no."

Among those who responded to the question, 78% indicated that their employers did require that they maintain an NBRC credential as a condition for employment. There are still therapists in the population with credentials that were earned for a lifetime, but that percentage will shrink going forward since every therapist credentialed since July 2002 must renew his or her credential every five years.



Figure 41. NBRC credential maintenance requirement

17. Which of the following NBRC credentials have you earned that are not expired? (Select all that apply.)

The oversampling of directors from hospitals and faculty from education programs that we documented earlier should be considered when interpreting results shown in Table 22. We particularly expected that the RRT group was larger as a percentage of the sample than it was as a percentage of the population.

Table 22. NBRC credentials earned

	Resp	onses	Percent of	Dopulation
	N	Percent*	Cases in the Sample	Projection**
Adult Critical Care Specialist (RRT-ACCS)	725	4.9%	8.2%	12,053
Certified Respiratory Therapist (CRT)	4,559	30.9%	51.7%	75,795
Certified Pulmonary Function Technologist (CPFT)	532	3.6%	6.0%	8,845
Neonatal Pediatric Specialist (CRT-NPS or RRT-NPS)	1,250	8.5%	14.2%	20,782
Sleep Disorders Specialist (CRT-SDS or RRT-SDS)	99	0.7%	1.1%	1,646
Registered Pulmonary Function Technologist (RPFT)	261	1.8%	3.0%	4,339
Registered Respiratory Therapist (RRT)	7,306	49.6%	82.8%	121,464
Total***	14,732	100.0%	167.0%	

* The percentage value was based on the number of people who responded to this question.

** Projected certification = (Frequency/11,516) x 191,457, where 191,457 = number of active therapists in total population.
*** Respondents were allowed to select each option that applied. Respondents who earned the CRT and RRT credentials selected both options. Therefore, the sum of row frequencies exceeds 11,516.

18. If you hold an unexpired nursing credential, which of the following is it? (Select all that apply.)

Therapists who had achieved a credential in nursing in addition to respiratory therapy were summarized in Table 23.

Table 23. Unexpired NCLEX credentials

				Percent of	Donulation
		N	Percent	Cases in the Sample*	Population Projection**
Nursing Credentials	Licensed Practical Nurse (LPN)	43	37.7%	38.1%	715
	Registered Nurse (RN)	71	62.3%	62.8%	1,180
Total***		114	100.0%	100.9%	

* The percentage was based on the number of people who responded to this question.

** Projected certification = (Frequency/11,516) x 191,457, where 191,457 = number of active therapists in total population.

*** Respondents were allowed to select all that applied.

19. What additional certifications have you completed?

The degree to which therapists had achieved certifications related to life-saving and tobacco-related procedures was summarized in Table 24.

Table 24. Certifications completed

		Resp	onses	Percent of	Denvilation
		N	Percent	Cases in the Sample*	Population Projection**
	Advanced Cardiac Life Support (ACLS)	6,861	27.0%	80.8%	114,066
Other Certifications	Basic Cardiac Life Support (BCLS)	8,128	32.0%	95.8%	135,130
	Neonatal Resuscitation Program (NRP)	4,770	18.8%	56.2%	79,303
	Pediatric Advanced Life Support (PALS)	4,980	19.6%	58.7%	82,794
	Smoking Cessation or Tobacco Treatment specialist	680	2.7%	8.0%	11,305
Total***		25,419	100.0%	299.5%	

The percentage was based on the number of people who responded to this question.

** Projected certification = (Frequency/11,516) x 191,457, where 191,457 = number of active therapists in total population. *** Respondents were allowed to select all that applied.

20. Which of the following other credentials have you earned that are not expired?

The largest subgroup within the sample was therapists who were also credentialed as asthma educators (Table 25). This group represented more than one quarter of the sample. We also observed a large subgroup of therapists credentialed as smoking cessation specialists. We cautiously offer population projections for these subgroups because oversampling is again likely.

	Resp	onses	Percent of	Population
	N	Percent	Cases*	Projection**
Certified Asthma Educator (AE-C)	307	21.2%	25.5%	5,104
Certified Cardiographic Technician (CCT)	25	1.7%	2.1%	416
Certified Case Manager (CCM)	11	0.8%	0.9%	183
Certified Hyperbaric Technologist (CHT)	37	2.6%	3.1%	615
Certified Neonatal-Pediatric Transport (C-NPT)	81	5.6%	6.7%	1,347
Certified Procurement Transplant Coordinator (CPTC)	8	0.6%	0.7%	133
Emergency Medical Technician (EMT)	148	10.2%	12.3%	2,461
Paramedic	72	5.0%	6.0%	1,197
Registered Cardiovascular Invasive Specialist (RCIS)	9	0.6%	0.7%	150
Registered EEG Technologist (R.EEG.T)	20	1.4%	1.7%	333
Registered Electrophysiology Technologist (R.EP.T)	6	0.4%	0.5%	100
Registered Polysomnographic Technologist (RPSGT)	154	10.6%	12.8%	2,560
Registered Vascular or Cardiac Ultrasound Credential (RDMS, RDCS, RVT, RVS)	21	1.5%	1.7%	349
Smoking Cessation specialist	248	17.1%	20.6%	4,123
Other Certification	301	20.8%	25.0%	5,004
Total***	1,448	100.0%	120.3%	

Table 25. Other credentials earned

* The percentage was based on the number of people who responded to this question.

** Projected certification = (Frequency/11,516) x 191,457, where 191,457 is the number of active therapists in total population.

*** Respondents were allowed to select all that applied.

21. Which of the following best describes how you learned to perform in the role of a respiratory therapist?

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Most sample members had graduated from an education program that made them eligible for the RRT credential (Figure 42 and Appendix C <u>Table 71</u>). Here again, oversampling among hospital director and educator groups likely skewed population projections upward for the advanced level group and downward for the other groups. Likewise, the high percentage of missing responses is notable because the other options should have covered most of the possibilities.



Figure 42. Respiratory therapy training/education

22. If you earned a college degree when you became eligible for your respiratory therapy credential, what type of degree was it?

The spike in missing responses to this question caught our attention as well. We observed that a growing number of respondents had stopped submitting responses entirely by the time they had arrived at this point in the survey.

As shown in Figure 43 and Appendix C <u>Table 72</u>, there were more than four therapists who graduated with an associate degree for every therapist who graduated with a bachelor's degree from their respiratory therapy programs.



Figure 43. Degree earned when eligible for credential

23. What is the highest academic level you have achieved?

The first thing we noted about Figure 44 and Appendix C<u>Table 73</u>, was the slight decrease in missing responses. Some therapists within this sample were willing to indicate the highest academic degree they had earned but did not give the type of degree they had earned from their respiratory education program.

We added Table 26 to the report to illustrate that substantial numbers of respiratory therapists in this sample had achieved academic degrees that were more advanced than the degree they earned from their original respiratory therapy education program.



Figure 44. Highest academic level achieved

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Table 26. Comparisons of the valid percentages of degrees earned from the respiratory therapy program and the highest academic degree

Degree	Initial degree from the respiratory therapist education program	Highest academic degree
Associate	81.8	51.3
Bachelor's	17.0	31.9
Master's or	1.2	12 1
Doctorate	1.2	12.1

24. Do you hold a Baccalaureate or graduate degree in a health-related field?

Just less than one-quarter of respondents indicated that they had achieved a baccalaureate or graduate degree in a health-related field. The oversampling of department directors and educators should be recalled when interpreting the projected population of therapists with a baccalaureate degree. In other words, there are likely fewer than the 47,449 described in Appendix C<u>Table 74</u>.



Figure 45. Baccalaureate or Graduate degree in health-related field

25. In what field of study is your highest health-related degree?

Respondents who had selected "Yes" for the previous item were directed to this follow-up question. For every respondent who achieved a baccalaureate degree in respiratory therapy, there was another respondent who had achieved a baccalaureate degree in another health-related domain.

An option was provided for survey respondents to type an 'Other' field of study that wasn't included among the list of other choices. Again, upon review of the free responses additional categories were created (Nursing, Biology/Chemistry, Medicine, Health Informatics, Psychology/Mental Health) and responses were recategorized. Frequencies can be found in Appendix C <u>Table 75</u>.



Figure 46. Field of health-related Baccalaureate/Graduate degree

26. Are you presently pursuing an academic degree that is higher than one you have already earned?

Assuming that most of the 23% of the sample who skipped this item did so because they determined the question did not apply to them, we concluded it was most likely that about 22% of therapists in this sample were pursuing a higher academic degree at the time this study was done. Frequencies can be found in Appendix C Table 76.



Figure 47. Presently pursuing higher academic degree

Additional Analyses

Responses to the respondents' highest degree were recoded to make it easy to see the percentage who had already achieved at least a Bachelor's degree.

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Figure 48. Highest academic level combined

Information cross tabulated below is based on responses from two items. There were 12.9% of the sample in the group called **Associate and lower** who also indicated that they were pursuing a higher academic degree. There were 43.9% of all respondents from the group called Bachelor's and higher. After summing these two values (12.9% + 43.9%), one could say that 56.8% of the study sample had at least achieved a Bachelor's degree or were working towards their next degree.

			Are you pu academic de higher than o already	ursuing an egree that is one you have earned?				
			Yes	No	Total			
		Count	1,130	3,796	4,926			
Academic subgroup	Associate and lower	% of Total	12.9%	1,130 3,796 12.9% 43.2%				
	Bachelor's and	Count	813	3,042	3,855			
	higher	% of Total	9.3%	34.6%	43.9%			
Total		Count	1,943	6,838	8,781			
		% of Total	22.1%	77.9%	100.0%			

Table 27. Highest academic level	subaroups by pursuina a	higher academic degree

However, there were some in the group labeled Associate and Lower who had not yet achieved an Associate degree, so for them the next degree was an Associate degree. The survey did not ask respondents to identify the next degree on which they were working. Table 28 was produced to tease out information from the available responses. Summing the percentages linked to bachelor's = 31.9%, master's = 10.9%, doctorate = 1.2%, and Associate-working-on-the-next-degree = 12.2%, showed that 56.2% of the study sample had achieved a bachelor's degree or were definitely working to achieve one.

Using the same method of teasing out information from subgroups, a 2017 study had showed that 55.1% of the study sample had achieved a bachelor's degree or were definitely working to achieve one. The difference

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between the 56.2% result in 2020 and the 55.1% result in 2017 was +1.1%. There had been +1.6% growth between 2014 and 2017 so there has been a persistent, small gain in the percentages within these samples of therapists who have had a bachelor's degree.

Figure 49 illustrates what could be expected in the future, which includes the time it will take to be able to say that 80% of respiratory therapists have a bachelor's degree. Based on samples from 2014, 2017, and 2020, the general inference is that the percentage of therapists who have at least the bachelor's degree continues to grow. The pace of growth has only been between 1% to 2%, but it is growth rather than contraction. However, because the pace of growth is small, the point at which it will be said that 4 out of 5 therapists have achieved a bachelor's degree remains decades away.

The last point Figure 49 illustrates is that small changes in the rate of growth would have large effects on the amount of time it would take to achieve the 80% threshold. A 1.1% rate of growth added 20 years to the projection that is expected in 2020 as compared to the projection in 2017 when the rate of growth was observed to be 1.6%. A short-term goal of moving the rate of growth back toward 2% could steepen the slope enough to hit the 80% threshold decades sooner.

Are you pursuing an academic degree that is higher than one you have already earned? Total Yes No 1 4 Some HS but no Count 5 diploma % of Total 0.0% 0.0% 0.1% Count 12 46 58 HS diploma/GED % of Total 0.1% 0.5% 0.7% Count 44 310 354 Some college but no degree % of Total 4.0% 0.5% 3.5% Count 1073 3436 4509 Associate 12.2% % of Total 39.1% 51.3% Count 638 2159 2797 Bachelor's % of Total 7.3% 24.6% 31.9% 792 Count 165 957 Master's % of Total 1.9% 9.0% 10.9% Count 10 91 101 Doctorate % of Total 0.1% 1.0% 1.2% Count 1943 6838 8781 Total 22.1% 77.9% 100.0% % of Total

Table 28. Highest academic level by pursuing higher academic degree



Figure 49.Bachelors Degree Acquisition in Comparison to 80% Threshold

27. If you are pursuing a higher academic degree, which of the following best describes your goal?

Among those who were pursuing a higher academic degree, more than 60% intended to advance their career in respiratory care while the rest intended to change their careers.

One important bit of information revealed by Table 60 was that 6.3% of respiratory therapists in this sample were actively working to take their careers away from respiratory care. For every respondent who was looking for a career change, there were nearly two respondents who intended to advance their careers within respiratory care. Frequencies can be found in Appendix C <u>Table 77</u>.



Figure 50. Goal for pursuing higher academic degree

28. Does your employer offer a program that discounts, reimburses, or forgives tuition?

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Most respondents were aware that their employer offered tuition assistance. Although it was the smallest group, approximately 12% of the sample was unsure whether their employers offered tuition reimbursement, forgiveness, or discounts so the percentage of the population with access to tuition assistance from their employer could be higher. Frequencies can be found in Appendix C <u>Table 78</u>.



Figure 51. Employer offers tuition reimbursement

The next several questions, #29 - 33, were addressed to those who provided direct patient care. Survey respondents who did not directly care for patients were instructed to skip to Question #34. The number of people who did not provide a response to these questions was expected to increase when compared to other survey items.

29. If you work in a setting where therapists are assigned to the management of mechanical ventilation, approximately how many patients receiving mechanical ventilation are assigned to each therapist?

The typical respondent among those who answered this question indicated that therapists were assigned six patients who were receiving mechanical ventilation. Frequencies can be found in Appendix C <u>Table 79</u>.

Table 29. Descriptive statistics for patients receiving mechanical ventilation assigned to therapists

	N		Std. Error of				
Valid	Missing	Mean	Mean	Median	Std. Deviation	Minimum	Maximum
6,146	5,370	6.49	.042	6	3.31	1	25



Figure 52. Patients receiving mechanical ventilation assigned to therapists

30. If you work in an acute care hospital, please indicate the typical percentage of time you spend in each area when providing direct patient care.

Table 30 showed that at least some respondents in this sample spent all their time in one area. Among those who divided their time, a typical respondent spent the most time in adult ICUs followed by another unit.

Telemedicine/telehealth and pulmonary rehab required the smallest percentage of therapists' time within the whole sample (Table 30). However, we expected that this was because some hospitals did not have such areas of specialization. We reached this conclusion by observing that the median value for those settings was zero, respectively, which meant that less than one-half of this sample worked in hospitals with those locations.

Table 30. Percentage of time spent in hospital units

	Ν		N		Std.				
	Valid	Missina	Mean	Error of Mean	Median	Std. Deviation	Minimum	Maximum	
Adult ICU	6,181	5,335	37.21	.411	30.00	32.301	0	100	
Pediatric ICU	6,181	5,335	5.33	.204	.00	16.012	0	100	
Neonatal IU	6,181	5,335	9.63	.285	.00	22.429	0	100	
General Medical/ Surgical floor	6,181	5,335	19.82	.282	15.00	22.161	0	100	
Emergency Department	6,181	5,335	15.27	.240	10.00	18.848	0	100	
Telemedicine/telehealth	6,181	5,335	1.22	.076	.00	5.998	0	100	
Pulmonary Rehabilitation	6,181	5,335	2.02	.152	.00	11.915	0	100	
Pulmonary Function Lab	6,181	5,335	4.48	.222	.00	17.433	0	100	
Other Department	6,181	5,335	5.02	.230	.00	18.0777	0	100	



Figure 53. Percentage of time spent in Adult ICU

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Figure 54. Percentage of time spent in Pediatric ICU



Figure 55. Percentage of time spent in Neonatal ICU



Figure 56. Percentage of time spent in General Med/Surg floor



Figure 57. Percentage of time spent in Emergency Department

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Figure 58. Percentage of time spent in Telemedicine/telehealth



Figure 59. Percentage of time spent in Pulmonary rehabilitation

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Figure 60. Percentage of time spent in Pulmonary function lab



Figure 61. Percentage of time spent in Other area

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31. When providing direct patient care, what percentage of your time do you spend caring for patients with the following diseases/disorders?

Except for the asthma group mean as compared to the mean for the other chronic pulmonary diseases group, each mean value shown in Table 31 was significantly (p<.05) different from each of the other mean values as Table 32 showed. COPD patients took nearly 40% of the time of therapists in this sample. After adding the percentages of time spent with asthma patients and those with other chronic pulmonary diseases, therapists spent 72% of their time with patients who had a chronic obstructive lung disease.

	N			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
COPD	6,595	4,921	39.63	.308	40	25.03	0	100
Asthma	6,595	4,921	16.25	.175	15	14.19	0	100
Sleep disorders	6,595	4,921	9.56	.201	4	16.31	0	100
Other chronic								
pulmonary	6,595	4,921	16.29	.216	10	17.53	0	100
diseases								
Other	6 505	4 0 2 1	10.06	201	10	22.04	0	100
diseases/disorders	0,595	4,921	10.20	.204	10	23.04	0	100

Table 31. Percentage of time spent caring for patients with diseases/disorders

F(4,866006) = 2241.07, p<.000, eta square = .214

Table 32. Mean differences in percentage of time spent caring for patients with diseases/disorders

(I) group	(J) group							
			Sleen	Other Chronic Pulmonary	Other Diseases/			
	COPD	Asthma	Disorders	Disease	Disorders			
COPD		23.381*	30.072*	23.339*	21.376*			
Asthma	-23.381*		6.691*	042	-2.005*			
Sleep Disorders	-30.072*	-6.691*		-6.733*	-8.696*			
Other Chronic Pulmonary Disease	-23.339*	.042	6.733*		-1.963*			
Other Diseases/Disorders	-21.376*	2.005*	8.696*	1.963*				

* The mean difference is significant at the 0.05 level.

32. When providing direct patient care, has your employer expected you to deliver therapy to multiple patients in different rooms or locations simultaneously within the last year?

Among those who did respond, less than one-half indicated that their employer did expect them to deliver therapy to different patients at the same time. Frequencies can be found in Appendix C <u>Table 80.</u>



Figure 62. Expectation to deliver therapy to multiple patients in different locations simultaneously.

33. When providing direct patient care, for what percentage of recent shifts have you been unable to complete all work assigned to you?

Figure 61 revealed an important result. The most frequent response we received to this question was the omission of a selection followed by a selection of zero. Some of those who left the question blank may have also been indicating that no work was missed. More than two-thirds of the sample were associated with those who were able to complete all assigned work and those who skipped the question. When work was missed, the typical response indicated that less than 10% of shifts had unfinished work. Frequencies can be found in Appendix C Table 81.



Figure 63. Percentage of recent shirts respondents have been unable to complete all assigned work

34. Does your employer provide a system that helps you to prioritize your work assignments when providing direct patient care and there is not enough time to complete them all?

Question #34 appeared on the page that followed the survey items asking about respondents' experiences with direct patient care. Among respondents who provided patient care, the availability of a work prioritization system was split fairly evenly. Frequencies can be found in Appendix C <u>Table 82</u>.



Figure 64. Availability of a work prioritization system

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35. When providing direct patient care, how often do you use the prioritization system?

Among those who gave an affirmative response to the previous item, about two-thirds used an employer-provided prioritization system every day. Frequencies can be found in Appendix C <u>Table 83</u>.



Figure 65. Use of prioritization system

36. Do you deliver respiratory care by protocol when providing direct patient care?

About half of the sample indicated that they used protocols during delivery of respiratory care to patients. Frequencies can be found in Appendix C <u>Table 84</u>.



Figure 66. Use of protocols to deliver patient care

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37. Approximately what percentage of the care you provide is delivered by protocol?

Among those who submitted an affirmative response to the item just above, most used protocols for at least half of the care they provided. Frequencies can be found in Appendix C <u>Table 85</u>.



Table 33. Descriptive statistics for percentage of respiratory care delivered by protocol



Approximately what percentage of the care you provide is delivered by protocol?

Figure 67. Percentage of care delivered by protocol

38. What kind of shift do you typically work?

Among those who worked in shifts, the largest subgroup said they worked 12-hour shifts. 8-hour shifts were also common, cited by nearly one quarter of respondents. Together, 85% of respiratory therapists who answered this survey question worked 8-hour shifts or 12-hour shifts. Frequencies can be found in Appendix C <u>Table 86</u>.



Figure 68. Shift worked

39. Have you received a Pneumococcal vaccination within the past 12 months?

Only about 13% of respondents gave a definitive affirmative answer about receiving a pneumococcal vaccination within the past 12 months.



Figure 69. Have you received a pneumococcal vaccination in the past 12 months?

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40. Have you received an Influenza vaccination within the past 12 months?

In contrast to the previous question, about 65% of respondents had received an influenza vaccination in the past 12 months.



Figure 70. Have you received an influenza vaccine in the past 12 months?

41. Have you ever used an electronic nicotine delivery system (ENDS)?

Only about 1% of respondents had used an ENDS.



Figure 71. Have you ever used an electronic nicotine delivery system (ENDS)?

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42. Have you smoked 100 or more cigarettes in your lifetime?



Only about 18% of respondents had ever smoked 100 or more cigarettes.

Figure 72. Have you smoked 100 or more cigarettes in your lifetime?

43. Which of the following best describes your nicotine use (cigarettes, cigars, pipe or spit tobacco)?

About 7% of respondents were using nicotine. Frequencies can be found in Appendix C Table 87.



Figure 73. Nicotine Use

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44. In what year did you quit using tobacco?

Information in <u>Table 88</u> in Appendix C was made more meaningful when reminded that the average age of therapists in the sample was 46 years. Half of the sample had quit 14 years ago, when the typical respondent was in his or her early 30s.



Figure 74. Year Nicotine Use Stopped

45. Were you furloughed from your primary employment during the COVID pandemic?

The initial quantity of positive responses to this question was less than the number of respondents who answered the follow-up questions to which those respondents were routed. Either individuals backed into these questions while using the navigation buttons within their internet browser or respondents changed their response to this question to the negative after responding to the follow up questions. A dozen respondents who indicated that they had not been furloughed but did provide additional details about their furlough were recoded with a positive answer to this question.

About 6% of the sample indicated being furloughed during the COVID pandemic. Frequencies can be found in Appendix C <u>Table 89</u>.



Figure 75. Furloughed during the COVID pandemic

46. Are you currently furloughed?

Of those who responded positively to the previous question, a few were still furloughed. Frequencies can be found in Appendix C <u>Table 90</u>.



Figure 76. Currently furloughed

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47. How many months was the furlough period?

The period for most respondents who experienced a furlough was less than one month. The median fell between 1 and 2 months. Frequencies can be found in Appendix C <u>Table 91</u>.



48. Did you travel to a COVID pandemic hotspot to provide respiratory care?

Five percent of the sample indicated that they had traveled to a hot spot to provide respiratory care. Frequencies can be found in Appendix C <u>Table 92</u>.



49. For how many weeks did you work at the hotspot last? Copyright © 2020. AARC. All Rights Reserved. For those who specified an amount of time spent at a COVID hotspot, the results ranged from less than one week to one year. The average therapist who spent time at a COVID hotspot was there for 10 to 12 weeks. Frequencies can be found in Appendix C <u>Table 93.</u>

Table 34. Descriptive statistics for weeks spent at COVID hotspot



Figure 79. Time spent at COVID hotspot

50. Where did your hotspot work occur?

Respiratory therapists who traveled to provide care at a COVID hotspot went both outside the US, and to all US states except Hawaii, Maine, Montana, and Vermont. The most frequently cited hot spot locations were California, New York, and Texas. Frequencies can be found in Appendix C <u>Table 94</u>.



Figure 80. COVID hotspot locations

51. With which of the following do you identify?

Females outnumbered males among respondents. Frequencies can be found in Appendix C Table 95.



Figure 81. Gender

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52. Do you identify as transgender?

A small fraction of respondents identified as transgender. Frequencies can be found in Appendix C <u>Table</u> <u>96.</u>



Figure 82. Identify as Transgender

53. Are you of Hispanic, Latino, or Spanish origin?

This question and options were used because they mirrored Federal guidelines for collecting this information and is the way in which United States Census information was collected in the year 2020. The majority of respondents fell into the non-Hispanic group. Frequencies can be found in Appendix C <u>Table 97</u>.



Figure 83. Hispanic origin



54. With which of the following 2020 United States Census Bureau descriptions do you identify?

Again, this question and options were used because they mirrored Federal guidelines for collecting this information. The fact that respondents could select more than one of the choices complicated interpretation.

Another factor that complicated interpretation was the fact that 3,509 people did not respond to this item. The population projections assumed that respondents from each race and ethnicity subgroup were equally likely to leave this survey item without a response. If that assumption was not true, then the projections were estimates at best.

		Resp	onses	Percent	Population
		N	Percent*	of Cases	Projection**
	White	6,549	79.1%	81.8%	156,594
	Black/African-American	796	9.6%	9.9%	19,033
	American Indian/Alaska Native	169	2.0%	2.1%	4,041
	Chinese	51	0.6%	0.6%	1,219
	Filipino	165	2.0%	2.1%	3,945
	Asian Indian	97	1.2%	1.2%	2,319
Race	Vietnamese	38	0.5%	0.5%	909
	Korean	20	0.2%	0.2%	478
	Other Asian	65	0.8%	0.8%	1,554
	Native Hawaiian	10	0.1%	0.1%	239
	Samoan	5	0.1%	0.1%	120
	Chamarro	8	0.1%	0.1%	191
	Other Pacific Islander	16	0.2%	0.2%	383
	Some Other Race	286	3.5%	3.6%	6,839
Total***		8,275	100.0%	103.3%	

Table 35. Race

* The percentage was based on the number of people who responded to this question.

** Projected ethnicity = (Frequency/8,007) x 191,457 where 191,457 = number of active therapists in total population. ***Respondents were allowed to select multiple responses.

Responses to the race and Hispanic culture questions were cross tabulated in Table 36 to reveal more details.

Table 36. Crosstab of Race by Hispanic Ethnicity

			Are yo	Are you of Hispanic, Latino, or Spanish origin?				
			Not Hispanic	Yes - Mexican, Mexican American, or Chicano	Yes - Puerto Rican	Yes – Cuban	Yes - Another Hispanic, Latino, or Spanish origin	Total
	White	Count	6,126	252	40	22	84	6,524
	Black/African- American	Count	762	4	6	3	10	785
	American Indian/Alaska Native	Count	120	41	0	0	7	168
	Chinese	Count	48	0	0	2	1	51
	Filipino	Count	158	4	1	0	1	164
_	Asian Indian	Count	95	1	0	0	1	97
Race	Vietnamese	Count	38	0	0	0	0	38
	Korean	Count	19	0	1	0	0	20
	Other Asian	Count	63	2	0	0	0	65
	Native Hawaiian	Count	9	1	0	0	0	10
	Samoan	Count	4	1	0	0	0	5
	Chamarro	Count	5	1	0	1	1	8
	Other Pacific Islander	Count	13	0	1	0	2	16
	Some Other Race	Count	131	74	28	9	41	283
Total		Count	7,367	356	74	32	137	7,966

55. Are you a member of the AARC?

Approximately 43% of respondents gave an affirmative response to this item, which projects a population of 82,478. However, the AARC reported that it had 44,675 members when this report was assembled in November 2020, so AARC members were oversampled among respondents.



Figure 84. AARC Membership

Summary of Oversampled Populations

Results of this report caused us to conclude that therapists from the following subgroups were overrepresented in these results:

- AARC members
- Certified Asthma Educators
- Directors of respiratory care from acute care hospitals
- Therapists who primarily worked in education settings

Summary of Yes-No Responses

This survey relied on several questions in which respondents were prompted to select "Yes" or "No." Some chose not to respond, which represented a third response. Table 37 summarizes these responses by giving a high and low estimate of the percentage of "Yes" responses that were reported for each question.

The high estimate was the valid percent value, which assumed that those who left the question without a response were equally likely to have selected "Yes" or "No." The low estimate assumed that respondents skipped the question when it did not apply to them rather than select "No." The truth most likely lies somewhere between the low and high estimate for each question, which was why we summarized them here. Lastly, we rank-ordered these responses from high to low based on the high estimate.

Table 37. Low and high estimates for affirmative responses to survey items limited to Yes/No options

	Estimates of the		
	was	true	
Question from the survey	Low	High	
Have you received an Influenza vaccination in the past 12 months?	65.4	91.6	
Does the employer for your primary job require that you maintain a NBRC credential as a condition of employment?	60.2	78.1	
Are you a member of the AARC?	43.1	60.5	
When providing direct patient care within the last year, has your employer expected you to deliver therapy to multiple patients in different rooms or locations simultaneously?	27 9	44 8	
Do you hold a Baccalaureate/graduate degree in a science- related field?	24.8	32.1	
Have you smoked 100 cigarettes in your lifetime?	18.5	25.9	
Are you presently pursuing an academic degree that is higher than one you already have?	16.9	22.1	
Have you received a Pneumococcal vaccination in the past 12 months?	13.4	19.0	
Are you currently furloughed?	1.1	18.1	
Were you furloughed from your primary employment during the COVID pandemic	6.4	8.9	
Did you travel to a COVID pandemic hotspot to provide respiratory care?	5.0	7.0	
Have you used an electronic nicotine delivery system (ENDS)?	1.4	2.0	

Compensation Factors

Although this study was done in 2020, questions about annual compensation asked therapists to respond based on the previous full year, which was 2019. Values for total compensation (from the primary job) in some cases were far removed from most of the other survey respondents, which caused them to be considered outliers. There were about 3,024 respondents who chose not to provide a total compensation value; a few responded in a similar fashion by entering a value of zero. Other cases were associated with high values ranging into the millions for annual compensation. The resulting distribution of 11,516 values strongly deviated from characteristics that are associated with a normally distributed set of values.

Because analyses that followed relied on the assumption that the dependent variable (total compensation from the primary job in 2019) was normally distributed, we removed the extreme values. We retained 8,206 cases after removing cases that were (1) missing a value, (2) showing a value less than \$1,000, or (3) showing a value greater than \$170,000.

After removing outlying cases, the fact that the mean value exceeded the median value in Table 38 and the right tail of the histogram was longer than the left tail in *Figure 85*, indicated that perfect normality still had not been achieved. However, comparing information in the first row of Table 19 and Figure 34 (with outliers included) to Table 38 and *Figure 85* (after outliers were excluded) indicated to us that the distribution of the total compensation variable had moved enough toward normality to proceed.

Table 38. Descriptive statistics for total compensation in 2019 from primary job

N			Std. Error of		Std.		
Valid	Missing	Mean	Mean	Median	Deviation	Minimum	Maximum
8,206	3,310	\$63,226.67	\$280.43	\$60,000	\$25,403.74	\$1,000	\$170,000



Wages for Compensation Section

Factors Potentially Related to Compensation

The intent behind this phase of the study was to identify those factors that shared a systematic relationship with 2019 total compensation, but to also narrow down the list to those factors that really mattered. To begin the narrowing process, there were twenty bivariate correlations with total compensation that were statistically significant (p<.05) in Table 39. One factor (pursuing a higher academic degree) fell away from consideration at this stage because its bivariate correlation with total compensation did not reach the significance threshold.

Table 39	. Correlations	of potential	2019 total	compensation	predictors	sorted by	strength
					1		

		Correlation	Sample
	Factor	(R)	Size
1	Total experience as a respiratory therapist since training	.333	8,188
2	Hours worked each week at primary venue	.292	8,082
3	Age	.265	8,184
4	Experience with current primary employer	.265	8,193
5	Highest academic degree achieved	.262	7,861
6	Whether the CRT-NPS or RRT-NPS credential had been achieved	.205	8,206
7	Satisfaction with primary job	.189	7,481
8	Whether care is delivered by protocol	.186	7,433
9	Whether respondent was an AARC member	.166	7,348
10	Whether employer provides a work prioritization system	.130	7,481

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Figure 85. Distribution of compensation after removing outlying cases

	Factor	Correlation	Sample Size			
11	The degree earned from respiratory therapy school	106	7 3/3			
12	Whether the PPT credential had been achieved	101	8 206			
12	Whether the DBT ACCS eredential has been achieved	.101	0,200			
13	whether the RRT-ACCS credential has been achieved	.096	8,206			
14	Whether the CPFT credential had been achieved	.086	8,206			
15	Whether professional training was based on-the-job, focused on entry-	.068	7,870			
	level, or focused on the advanced level					
16	Whether the RPFT credential had been achieved	.061	8,206			
17	Whether employer requires maintenance of an NBRC credential	.043	7,927			
18	Typical number of patients receiving mechanical ventilation cared for	064	5,571			
	by one therapist					
19	Whether employer requires simultaneous patient care	114	6,462			
20	The year one plans to leave the workforce	148	8,111			
	Threshold for Significant Correlations (p < .05)					
21	Whether respondent was pursuing a higher academic degree	.015	7,857			

We sought next to find those factors that <u>together</u> explained a significant amount of variability in 2019 total compensation. We used a multiple regression statistical model to assess which of the significant predictors from Table 39 would continue to explain variability in 2019 total compensation while controlling for the factors that had already entered the model. If two factors were redundant in explaining variability, then the weaker factor would be left out of the model according to the selection criterion built into the software.

Results of this process cut down the number of factors as shown in Table 40. The net effect was an explanation of 26% of variability in 2019 total compensation. The last study of human resources had explained 33% of variability in 2013 compensation. The reduction in explained variability was expected since the sample size was smaller in 2020.

The long list of potential predictors of 2019 total compensation was narrowed to a shorter list of eleven factors by the multiple regression procedure. Evaluation of information in Table 40 yielded some potentially useful observations about total compensation in 2019. While evaluating these points, it may help to recall that the dependent variable was one year's worth of compensation.

- Each year of total work experience as a respiratory therapist added \$399 dollars
- Each hour worked in a typical week added \$550
- Each step up on the academic degree scale was associated with an additional \$4,499
- Each increment of increased job satisfaction was associated with an additional \$2,155
- The CRT-NPS or RRT-NPS credential was associated with an additional \$7,654
- Each year of work experience with one's current primary employer was associated with an additional \$276 dollars
- The RRT credential was associated with an additional \$4,828
- AARC membership was associated with an additional \$2,355
- The RRT-ACCS credential was associated with an additional \$4,013
- Delivering respiratory care by protocol was associated with an additional \$2,115
- Therapists who reported that their employers required that they give simultaneous care to multiple patients was associated with \$2,143 less than their counterparts who worked under no such policy

		Proportion of Shared	Significance
		Variance (R ²)	linked to the
Step	Factor	after entry	R ² change
1	Total experience as a respiratory therapist since training	.103	<.001
2	Hours worked each week at primary venue	.172	<.001
3	Highest academic degree achieved	.206	<.001
4	Satisfaction with primary job	.224	<.001
5	Whether the CRT-NPS or RRT-NPS credential had been achieved	.240	<.001
6	Experience with current primary employer	.248	<.001
7	Whether the RRT credential had been achieved	.254	<.001
8	Whether respondent was an AARC member	.257	<.001
9	Whether employer requires simultaneous patient care	.259	<.001
10	Whether the RRT-ACCS credential had been achieved	.261	<.001
11	Whether care is delivered by protocol	.263	<.001
	Factors that did not increase R ²	further	
12	Age		
13	Whether employer provides a work prioritization system		
14	Whether the RPFT credential had been achieved		
15	The degree earned from respiratory therapy school		
16	Whether the CPFT credential had been achieved		
17	The year one plans to leave the workforce		
18	Typical number of patients receiving mechanical ventilation cared for by one therapist		
19	Whether employer requires maintenance of an NBRC credential		
20	Whether professional training was based on-the-job, focused on entry-level, or focused on the advanced level		

We planned to control for the influence of these variables and compare differences between average 2019 compensation among two sets of subgroups described in the next section. Our purpose was to determine whether any of the subgroup factors contributed uniquely to 2019 total compensation explanation beyond what was explained by the factors listed in Table 41.

Table 41. Multiple regression coefficients for each significant factor

Factor	Regression coefficient	Details about the underlying data
Total experience as a respiratory therapist since training	398.78	Whole or fractional numbers for example 5, 6.5
Hours worked each week at primary venue	549.60	Whole numbers for example 20, 36, 40
Highest academic degree achieved	4,499.27	Whole numbers 1=Some high school, but no degree 2=High school diploma/GED 3=Some college, but no degree 4=Associate's degree 5=Bachelor's degree 6=Master's degree 7=Doctorate degree
Satisfaction with primary job	2,155.33	Whole numbers between 0 = unsatisfied and 5=completely satisfied
Whether the CRT-NPS or RRT-NPS credential had been achieved	7,654.31	Whole numbers 0=No 1=Yes
Experience with current primary employer	275.82	Whole or fractional numbers for example 5, 6.5
Whether the RRT credential had been achieved	4,828.30	Whole numbers 0=No 1=Yes
Whether respondent was an AARC member	2,355.48	Whole numbers 0=No 1=Yes
Whether the RRT-ACCS credential has been achieved	4,013.26	Whole numbers 0=No 1=Yes
Whether employer requires simultaneous patient care	-2,142.79	Whole numbers 0=No 1=Yes
Whether respiratory care is delivered by protocol	2,114.98	Whole numbers 0=No 1=Yes
Constant in the equation	-4,570.58	

Regions and Job Titles

Some job title subgroups (Academic Educator, Quality/Compliance Coordinator/Manager, Industry Clinical Specialist/Representative/Salesperson, Research Coordinator/Associate, Academic Educator) were small. The groups were excluded from further analysis. These small groups also prevented the application of a two-way analysis of covariance (ANCOVA) model to permit assessment of potential interactions between regions and job titles. We considered aggregating these cases into what would have become a larger group of job titles labeled Other, but we decided that more useful information would be provided by leaving the cases within their own groups and only looking for main effects.

Regions

Four geographic regions had been defined earlier in this report and were used in this section to assess whether total compensation differed among them. An inspection of the "Observed mean" column of Table 42 indicated that compensation did differ within this sample, but this set of values was influenced by factors other than just region. A series of alternate explanations about why the observed means were different could have been proposed. For example, it could have been that respondents from one region tended to have more experience than those from another region so the observed difference in compensation between two

regions could have been attributed to experience differences, not differences associated with working in two regions.

We controlled for eleven of the alternate explanations about variance in total compensation by using an ANCOVA model to isolate whether geographic region truly exerted its own influence on total compensation. The column within Table 42 that described estimated means shows the values that could be attributed to the region factor after controlling for the eleven covariates. The F value (196.10) associated with the ANCOVA result (p<.0001, df 14, 5769) yielded an observed power of 1.0. (If a difference truly existed, then we would have detected it.) The effect size (eta squared) value was .32 indicating that the region factor had added to the explanation of variance beyond what had been explained (R^2 =.26) by the eleven covariates. Post-hoc analyses using the least significant difference technique indicated that each estimated mean was different than each of the other values.

Table 42. Total compensation for geographic regions

		Observed	Estimated mean after controlling	Observed standard	
Region	States	mean	for covariates ¹	deviation	Observed N
Northeast	MA, RI, NH, ME, VT, CT,				
	NJ, NY, PA	\$67,605	\$66,440	\$24,369	831
South	DC, DE, MD, VA, WV, NC,				
	SC, GA, FL, AL, TN, MS,				
	KY, LA, AR, OK, TX	\$57,306	\$57,422	\$21,447	2,389
Midwest	OH, IN, MI, WI, IL, IA, MN,				
	SD, ND, MO, KS, NE	\$56,932	\$56,895	\$20,093	1,429
West	MT, CO, WY, ID, UT, AZ,				
	NM, NV, CA, HI, OR, WA,				
	AK	\$70,361	\$71,025	\$27,176	1,121

¹ Covariates were listed in Table 41

Job Titles

As we had done for comparisons of total compensation by regions, we applied the same method to make comparisons among job titles. Differences between observed and estimated means again reflected the influence of the eleven covariates in Table 41. After removing responses from the smaller subgroups, the F value (131.98) associated with the ANCOVA result (p<.0001, df 19, 5,734) yielded an observed power of 1.0. The effect size value was .31.

Post-hoc comparisons among remaining job titles were more complicated than observed when making comparisons among geographic regions because there were 10 groups to compare instead of 4. The following statements summarize these results:

- The Manager/Director group had a significantly different mean than the mean for all other subgroups.
- The Supervisor group had a significantly different mean than the mean for all other subgroups.
- The Staff Therapist group had a significantly different mean than the mean for
 - Managers/Directors
 - Supervisors
 - Clinical Specialists
 - Pulmonary Function Technologists
 - o Others
- The Clinical Specialist group had a significantly different mean than the mean for
 - Managers/Directors
 - Supervisors
 - o Staff Therapists
 - Pulmonary Function Technologists

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- The Department Educator group had a significantly different mean than the mean for
 - Managers/Directors
 - Supervisors
 - Pulmonary Function Technologists
- The Disease Manager/Patient Educator group had a significantly different mean than the mean for
 - Managers/Directors
 - Supervisors
- The Pulmonary function Technologist group had a significantly different mean than the mean for
 - Managers/Directors
 - o Supervisors
 - Staff Therapists
 - Clinical Specialists
 - Department Educator
 - Sleep Technologists
 - o Others
- The Sleep Technologist group had a significantly different mean than the mean for
 - Managers/Directors
 - Supervisors
 - Pulmonary Function Technologists
- The Other group had a significantly different mean than the mean for
 - Managers/Directors
 - Supervisors
 - o Staff Therapists
 - Pulmonary Function Technologists

Job Title	Observed mean	Estimated mean after controlling for covariates ¹	Observed standard deviation	Observed N
Manager/Director of a department, program, or system	\$85,554	\$75,566	\$26,455	373
Supervisor	\$74,287	\$69,548	\$22,152	450
Staff Therapist	\$56,601	\$58,889	\$20,887	3,892
Clinical Specialist	\$64,626	\$61,611	\$22,945	299
Department Educator	\$70,869	\$60,659	\$15,514	68
Disease Manager/Patient Educator	\$64,430	\$59,453	\$17,998	51
Pulmonary Function Technologist	\$57,572	\$54,126	\$20,902	209
Sleep Technologist	\$58,313	\$61,319	\$20,048	46
Other	\$65,093	\$63,323	\$27,467	347

Table 43. Total compensation for job titles

¹ Covariates were listed in Table 40

Total Compensation Scenarios

Early Career

The utility of the information described above became more apparent when observing the ways in which various clusters of specific factors could be incorporated into a predictive model. The first such scenario starts in *Figure 86*. Our intent was to represent a therapist **one year** after earning an **Associate's degree** and starting a job as a respiratory therapist. We chose to assume the individual had worked for the **same employer**. We built in the expectation that the individual had achieved the **RRT credential** during the first year of employment. We also assumed that the individual was **mostly**, but not entirely **satisfied** with his or her working conditions, and that the therapist provided **respiratory care by protocol**.

We did not expect that the compensation value that was displayed in *Figure 86* was universally relevant because the value represented the contributions of therapists' responses from all regions and all job titles. We had demonstrated significant main effects for both of these factors. An opportunity to refine the first estimate was illustrated in *Figure 87*. After building in the assumption that the therapist in this scenario worked in the **southern region** and remained in a **staff therapist job**, we arrived at a refined estimate shown at the bottom of *Figure 87*. After one year of employment and achieving the RRT credential, we confidently expected that a typical staff therapist from the southern region would receive about \$42,000 in total compensation. However, another therapist who shared the same characteristics, but worked in the Northeast or Western region would be expected to receive \$10,000 to \$15,000 more in total compensation.

Prediction of A	innual Compensation in 2019 =			
Regression		Enter your		
coefficients	Factors	numbers here		Product
398.777	Total experience as a respiratory therapist since training	1	\$	399
549.595	Hours worked each week at primary venue	40	\$	21,984
4499.270	Highest academic degree achieved	4	¢	17 997
	1=some high school, but no degree: 2=high school/GED: 3=some	4	Ş	17,557
	college, but no degree: 4=associates degree: 5=bachelors			
	degree; 6=masters degree; 7=doctorate degree			
2155.325	Satisfaction with primary job	4	\$	8,621
	0=very unsatisfied, ready to quit; 5=very satisfied		-	
7654.307	Whether the CRT-NPS or RRT-NPS credential had been achieved	0	\$	-
	0=no; 1=yes			
275.820	Experience with current primary employer	1	\$	276
4828.298	Whether the RRT credential had been achieved	1	\$	4,828
	0=no; 1=yes			
2355.484	Whether an AARC member	0	\$	-
	0=no; 1=yes			
4013.262	Whether the RRT-ACCS credential has been achieved	0	\$	-
-2142.785	Whether employer requires simultaneous patient care	0	\$	-
2114.975	Whether respiratory care is delivered by protocol	1	Ś	2.115
		-	Ŧ	_,
(4,570.5	79) Regression model constant			(4,570.579)
		Subtotal	Ś	51,649

Prediction of Annual Compensation in 2019 =

Figure 86. Total compensation scenario after first year of employment

Compensation factors to refine the prediction

			Mean across	Enter your	
Factor	Group Means (\$)		groups	group mean*	Difference
Region	Northeast	\$66,440	\$ 62,946	\$ 57,422	\$ (5,524)
	South	\$57,422			
	Midwest	\$56,895			
	West	\$71,025			
Job title	Manager/Director	\$75,566	\$ 62,721	\$ 58,889	\$ (3,832)
	Supervisor	\$69,548			
	Staff Therapist	\$58,889			
	Clinical Specialist	\$61,611			
	Department Educator	\$60,659			
	Disease Manager/Patient Educator	\$59,452			
	Pulmonary function technologist	\$54,126			
	Sleep technologist	\$61,319			
	Other	\$63,323			
	Difference (Amount by which one co	uld adjus	t the compens	ation prediction)	\$ (9,356)
Best estimate of 2019 Compensation					\$ 42,294

Figure 87. Refinements to the one-year prediction

After a Decade

We envisioned a therapist with **ten years** of total experience while providing respiratory care, but there was a **job change after the first four years**. We assumed that the therapist was **very satisfied** in his or her job and had achieved a **Bachelor's degree** (either initially or after starting work as a therapist). We built in an expectation that the therapist occupied a job as a **clinical specialist**, **used protocols** to deliver patient care, and had achieved the **RRT-NPS credential** (while likely working mostly or entirely with children). We anticipated that the individual was a **member of the AARC** and worked in one of the states included in the **northeast region**. The models predicted that this individual would earn nearly \$76,000 in total compensation as illustrated in *Figure 89* but could be \$10,000 less when in the Midwest or Southern regions.

Prediction of Ann	ual Compensation in 2019 =			
Regression		Enter your		
coefficients	Factors	numbers here		Product
398.777	Total experience as a respiratory therapist since training	10	\$	3,988
549.595	Hours worked each week at primary venue	40	\$	21,984
4499.270	Highest academic degree achieved	5	Ş	22,496
	1=some high school, but no degree; 2=high school/GED; 3=some college, but			
	no degree; 4=associates degree; 5=bachelors degree; 6=masters degree;			
	7=doctorate degree			
2155.325	Satisfaction with primary job	5	\$	10,777
	0=very unsatisfied, ready to quit; 5=very satisfied			
7654.307	Whether the CRT-NPS or RRT-NPS credential had been achieved	1	\$	7,654
	0=no; 1=yes			
275.820	Experience with current primary employer	6	\$	1,655
4828.298	Whether the RRT credential had been achieved	1	\$	4,828
	0=no; 1=yes			
2355.484	Whether an AARC member	1	\$	2,355
	0=no; 1=yes			
4013.262	Whether the RRT-ACCS credential has been achieved	0	\$	-
	0=no; 1=yes			
-2142.785	Whether employer requires simultaneous patient care	0	\$	-
	0=no; 1=yes			
2114.975	Whether respiratory care is delivered by protocol	1	\$	2,115
	0=no; 1=yes			
(4,570.579)	Regression model constant			(4,570.579)
		Subtotal	\$	73,282

Figure 88. Total compensation scenario after a decade of employment

Compensation factors to refine the prediction

			Mea	n across		Enter your	
Factor	Group Means (\$)			groups		group mean*	Difference
Region	Northeast	\$66,440	\$	62,946	\$	66,440	\$ 3,495
	South	\$57,422					
	Midwest	\$56,895					
	West	\$71,025					
Job title	Manager/Director	\$75,566	\$	62,721	\$	61,611	\$ (1,110)
	Supervisor	\$69,548					
	Staff Therapist	\$58,889					
	Clinical Specialist	\$61,611					
	Department Educator	\$60,659					
	Disease Manager/Patient Educator	\$59,452					
	Pulmonary function technologist	\$54,126					
	Sleep technologist	\$61,319					
	Other	\$63,323					
Difference (Amount by which one could adjust the compensation prediction)					n prediction)	\$ 2,384	
Best estimate of 2019 Compensation					\$ 75,666		

Figure 89. Refinements to the one decade prediction

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Limits on Inferences about Total Compensation

The strength behind using a regression-based approach was our ability to narrow down a list of 21 potential factors that could have affected compensation to a list of 11 factors that really mattered. Redundant factors were weeded out. We verified two factors (region and job title) that can be confidently used to refine an initial estimate from the 11 factors.

Weakness from this approach lay in the kinds of inferences that we could anticipate some could try to make of these study results. After studying *Figure 84*, an employee could go to his or her employer and state, "I am very satisfied in my job, not just moderately satisfied, so you should pay me \$2,204 dollars more per year." Another employee could ask his or her employer, "If I become an AARC member, will you give me a \$2,255 dollar raise?"

Our response to both inquiries is that those generalizations of study results cannot be supported. Regression models measure associations between variables, the degree to which values move up and down together. What these models do not measure is cause and effect.

It is true that this study found that compensation within the sample tended to go up with job satisfaction. What remains unknown is whether more satisfied people perform better on the job. Higher performance levels are likely to be valued with more compensation. Alternatively, more compensation could encourage increased job satisfaction. However, results of this study cannot tease out whether the high compensation or the high performance came first.

Likewise, when considering AARC membership, we cannot say that every membership-holder received a direct compensation boost because he or she was a member. Potential alternative explanations include compensation and performance increased for members with (1) a stronger professional commitment, (2) an established communication network with other professionals, and (3) being better informed of trends and current practices. In other words, membership could have helped performance and so <u>secondarily</u> influenced compensation.

A similar mystery is linked to the one factor for which a positive response will yield a subtraction from the annual compensation total. This factor hinged on whether the employer expected respiratory therapists to provide care to more than one patient at a time. Therapists who reported that their employers followed this policy also tended to report receiving less compensation. However, this does not confirm that therapists get paid less <u>because</u> of this policy. Neither would it be justified for an employer to use results of this study to reduce compensation because they had just changed their policy to permit simultaneous care. We expect that it is most likely that this response was an indicator of economic stresses. Doing more with less could manifest in a policy that permits simultaneous care and manifest in lower compensation for everyone who works at the institution.

Appendix A. Human Resource Survey of Respiratory Therapists

2020 AARC Human Resource Survey of Respiratory Therapists
1. What is the zip code of the work setting where you spend most of your time?
2. What is your age in years?
3. For how many years have you practiced as a respiratory therapist since completing your training?
4. Which of the following best describes your military status?
Active duty
Reserve duty
Discharged
Never served
5. Acknowledging that you may work for more than one employer, your primary employer is defined as the one where you spend a majority of your work hours. How many years have you worked for your primary employer?
Please provide a number between 0.0 and 65.0, e.g., 5.5 not 5 1/2 years.
6. What is your best guess about the year you will leave the respiratory therapy workforce?

Hours Per Week

7. How many hours do you work in a typical week for the following employers?

	Primary Job	Second Job
Acute care hospital		
DME/Home care		
Long-term care/Rehab/SNF		
Education program		
Manufacturer/Distributor		
Non-profit association		
Outpatient facility		
Physician's office		
Registry (agency) providing temporary employees		

2020 AARC Human Resource Survey of Respiratory Therapists

Compensation

8. What is your hourly base wage at your primary job?

Please type your response without the dollar sign (\$), e.g., 24.00 or 36.15. <u>If salaried, divide annual salary by</u> 2080.

9. If you are eligible for a differential, please specify the additional \$ per hour earned at your primary job using the table below:

Please type your response without the dollar sign, e.g., 2.25._ If you are not eligible for a differential, proceed to the next question.

Evening shift	
Night shift	
Weekend	
Holiday	
On-call	

10. If you received a bonus last year, what was the amount?

Please type your response without the dollar sign, e.g., 2000. If you did not receive a bonus, proceed to the next question.

11. What do you estimate to be the total wages you earned in 2019?

Please round your response to the nearest whole number and type your response without the dollar sign or commas, e.g., 30000.

Primary Job

Second Job

12. By what percentage was your base wage increased when you last received a raise for your current position?

Please type your response without the percentage sign, e.g., 2.5 not 2.5%.

020 AARC Human Resource Survey of Res	piratory Therapists	
atisfaction		
3 Using the following scale, please indicate vo	our satisfaction with your primary job	
0. Upsetisfied Low ready	Completely esticited	
to quit this job	want to stay at this job	
0		
14. With which of the following are you LEAS	T satisfied about your primary job?	
Compensation and benefits		
Department administration and supervision		
Involvement in operational decisions		
Involvement in patient care decisions		
Opportunities for advancement		
Range of respiratory care services		
Workload		
15. If you have changed employers within the	Lact five years, what was the stronges	t roacon?
Compensation and benefits	e last live years, what was the shonges	t reason?
Department administration and supervision		
Involvement in operational decisions		
Involvement in patient care decisions		
Opportunities for advancement		
 Range of respiratory care services 		
Relocation		
◯ Workload		
\checkmark		

16.	Which of the following is <i>closest</i> to the title for your primary job?
\bigcirc	Manager/Director of a Department, Program, or System
\bigcirc	Supervisor
\bigcirc	Staff Therapist
\bigcirc	Clinical Specialist
\bigcirc	Department Educator
\bigcirc	Disease Manager or Patient Educator
\bigcirc	Quality/Compliance Coordinator/Manager
\bigcirc	Informatics Specialist (e.g., Clinical Analyst, Information Specialist)
\bigcirc	Pulmonary Function Technologist
\bigcirc	Sleep Technologist
\bigcirc	Research Coordinator or Associate
\bigcirc	Academic Educator (e.g., PD, DCE, faculty)
\bigcirc	Industry Clinical Specialist, Representative, or Salesperson
\bigcirc	Other (please specify)

6

ede	ntials
17. Car	Does the employer for your primary job require that you maintain a National Board for Respira e (NBRC) credential as a condition for employment?
\bigcirc	Yes
\bigcirc	No
18.	Which of the following NBRC credentials have you earned that are not expired?
Sele	ect all that apply.
	Adult Critical Care Specialist (RRT-ACCS)
	Certified Respiratory Therapist (CRT)
	Certified Pulmonary Function Technologist (CPFT)
	Neonatal/Pediatric Specialist (CRT-NPS or RRT-NPS)
	Sleep Disorders Specialist (CRT-SDS or RRT-SDS)
	Registered Pulmonary Function Technologist (RPFT)
	Registered Respiratory Therapist (RRT)
19.	If you hold an unexpired nursing credential, which of the following is it?
Sele	ect all that apply.
	Licensed Practical Nurse (LPN)
	Registered Nurse (RN)
20.	What additional certifications have you completed?
Sele	ect all that apply.
	Advanced Cardiac Life Support (ACLS)
	Basic Cardiac Life Support (BCLS)
	Neonatal Resuscitation Program (NRP)
	Pediatric Advanced Life Support (PALS)
	Smoking Cessation or Tobacco Treatment specialist

21. Which of the following other credentials have you earned that are not expired?
<u>Select all that apply.</u> Please omit academic degrees, fellowship designations, AHA instructor status, and certificates that do not lead to credentials behind your name (e.g., ACLS, PALS).
Certified Asthma Educator (AE-C)
Certified Cardiographic Technician (CCT)
Certified Case Manager (CCM)
Certified Hyperbaric Technologist (CHT)
Certified Neonatal-Pediatric Transport (C-NPT)
Certified Procurement Transplant Coordinator (CPTC)
Emergency Medical Technician (EMT)
Paramedic
Registered Cardiovascular Invasive Specialist (RCIS)
Registered EEG Technologist (R.EEG.T)
Registered Electrophysiology Technologist (R.EP.T)
Registered Polysomnographic Technologist (RPSGT)
Registered Vascular or Cardiac Ultrasound Credential (RDMS, RDCS, RVT, RVS)
Smoking Cessation specialist
Other (please specify)

2020 AARC Human Resource Survey of Respiratory Therapists

Training

22. Which of the following best describes how you learned to perform in the role of a respiratory
therapist?

- On-the-job training
-) In a program that prepared me for the CRT credential only
- In a program that prepared me for the RRT credential

23. If you earned a college degree when you became eligible for your respiratory therapy credential, what type of degree was it?

- Associate
- Bachelors
- Masters

24. What is the highest academic level you have achieved?

- Some high school, but no diploma
- High school diploma or GED
- Some college, but no degree
- Associates degree
- Bachelors degree
- Masters degree
- Doctorate degree

* 25. Do you hold a Baccalaureate or graduate degree in a health-related field?

- Yes
- 🔵 No

2020 AARC Human Resource Survey of Respiratory Therapists

Health-Related Field

26. In what field of study is your highest health-related degree?

- Health Sciences
 - Healthcare Administration
- Healthcare Management
- > Public Health
- Respiratory Therapy
- Other (please specify)

2020 AARC Human Resource Survey of Respiratory Therapists
Pursuing Degree
* 27. Are you pursuing an academic degree that is higher than one you have already earned? Yes No
 28. Does your employer offer a program that discounts, reiumburses, or forgives tuition? Yes No I don't know.
1:

Higher Academic Degree

29. What best describes your goal for pursuing a degree higher than one you have already earned?

Advance my respiratory care career

Change my career

2020 AARC Human Resource Survey of Respiratory Therapists

Clinical Work Assignments

If you do not provide direct patient care, proceed to the next page.

30. If you work in a setting where therapists are assigned to the management of mechanical ventilation, approximately how many patients receiving mechanical ventilation are assigned to each therapist?

31. If you work in an acute care hospital, please indicate the typical percentage of time you spend in each area when providing direct patient care.

Provide numeric responses excluding the percent sign, e.g., 15 not 15%. Your responses must sum to 100.

Adult ICU	
Pediatric ICU	
Neonatal ICU	
General medical and surgical floor	
Emergency Department	
Telemedicine/telehealth	
Pulmonary rehabilitation	
Pulmonary function lab	
Other	

32. When providing direct patient care, what is the typical percentage of time spent caring for patients with the following diseases/disorders?

Provide numeric responses excluding the percent sign, e.g., 15 not 15%. Your responses must sum to 100.

COPD	
Asthma	
Sleep disorders	
Other chronic pulmonary diseases	
Other diseases/disorders	

13

33. When providing direct patient care within the last year, has your employer expected you to deliver therapy to multiple patients in different rooms or locations simultaneously?

Yes

O No

34. When providing direct patient care, for approximately what percentage of recent shifts have you been unable to complete all work assigned to you?

* 35. Does your employer provide a system that helps you to prioritize your work assignments when providing direct patient care and there is not enough time to complete them all?

O Yes

O No

O I don't provide direct patient care.

Prioritization System

36. When providing direct patient care, how often do you use the prioritization system?

- Every day
- Once a week
- Once a month
- Less than once a month
Protocols

A protocol is defined as initiation or modification of a patient care plan following a predetermined structured set of physician orders, instructions or interventions in which the therapist initiates, discontinues, refines, transitions, or restarts therapy as the patient's medical condition dictates.

Note: This definition should not be confused with programs that include discontinuation of therapy without a reorder, flagging therapy for physician reorder, standing orders or policies that dictate therapy durations.

* 37. Do you deliver respiratory care by protocol when providing direct patient care?

- O Yes
- O No

I don't provide direct patient care.

38. Approximately what percentage of the care you provide is delivered by protocol?

2020 AARC Human Resource Survey of Respiratory Therapists
Demographics
39. What kind of shift do you typically work?
8-hour
10-hour
12-hour
Rotating (e.g., 8-hour/12-hour)
Other (please specify)
40. Have you received a Pneumococcal vaccination within the past 12 months?
⊖ Yes
No
41. Have you received an Influenza vaccination within the past 12 months?
Yes
No
42. Have you used an electronic nicotine delivery system (ENDS)?
⊖ Yes
Νο
43. Have you smoked 100 or more cigarettes in your lifetime?
* 44. Which of the following best describes your nicotine use (cigarettes, cigars, pipe or spit tobacco)?
Never tried nicotine
Experimented with nicotine a few times
Used nicotine, but have quit
Use nicotine less than once a day
Use nicotine once or more a day

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Nicotine Use

45. In what year did you quit using nicotine?

COVID-19 Pandemic

- * 46. Were you furloughed from your primary employment during the COVID pandemic?
- O Yes
- O No

COVID-19 Pandemic - Furlough

47. Are you currently furloughed?

O Yes

O No

48. How many months was the furlough period?

2020 AARC Human Resource Survey of Respiratory Therapists **COVID-19** Pandemic * 49. Did you travel to a COVID pandemic hotspot to provide respiratory care? O Yes O No

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COVID-19 Pandemic - Hotspot

50. For how many weeks did work at the hotspot last?

Provide a numeric response (e.g., 2.5).

51. Where did your hotspot work occur?

2020 AARC Human Resource Surve	y of Respiratory	/ Therapists
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Optional Questions - Gender

Responding to the following questions is optional.

- 52. With which of the following do you identify?
- Female
- Male
- Non-binary
- Prefer not to say

53. Do you identify as transgender?

- O Yes
- O No
- Prefer not to say

Optional Questions - Race/Ethnicity

54. Are you of Hispanic, Latino, or Spanish origin?
No
Yes - Mexican, Mexican American, or Chicano
Yes - Puerto Rican
Yes - Cuban
Yes - Another Hispanic, Latino, or Spanish origin (for example, Salvadoran, Dominican, Colombian, Guatemalan)
55. With which of the following 2020 United States Census Bureau descriptions do you identify?
Select all that apply.
White (for example, German, English, Lebanese, Egyptian)
Black or African-American (for example, African American, Jamaican, Haitian, Nigerian, Ethopian, Somali)
American Indian or Alaska Native (for example, Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barow Inupiat Traditional Government, Nome Eskimo Community)
Chinese
Filipino
Asian Indian
Vietnamese
Korean
Other Asian (for example, Pakistani, Cambodian, Hmong)
Native Hawaiian
Samoan
Chamarro
Other Pacific Islander (for example, Tongan, Fijian, Marshallese)
Some Other Race (please specify)

AARC Membership

56. Are you a member of the AARC?

O Yes

O No

Drawing Registration

For submitting a **completed** survey, you are eligible to register for a drawing. The winner will receive one complimentary year of AARC active membership.

Your survey responses will not be associated with your personal information.

57. If you would like to register for the drawing, please provide your contact information.

Name:	
Email Address:	
Phone Number:	

Conclusion

Thank you for completing the AARC Human Resource Survey for Respiratory Therapists.

Please forward the link to the survey to other respiratory therapists by clicking on the link below.

Send Email to Colleagues

Appendix B. Email and Postcard Invitations and Social Media Posts

Email sent to Therapists:



+

Dear FirstName LastName

The AARC is conducting a human resource study of the respiratory therapist workforce. Accurate information about respiratory therapists and the places they work is critical for identifying workforce trends. Your assistance with this project is vital.

You should be able to complete the survey within 20 minutes. Survey participants can register to win an active AARC membership for one year.

You can expand participation by forwarding this email to fellow therapists. Please hurry as the survey will only be available until **September 27, 2020**.

Click on the link below to start the survey. If you have questions or experience difficulties, contact Jennifer Benavente (AARC.Therapist@nbrc.org).

Link to Therapist Survey

Survey responses from what we hope to be a large, representative group of therapists will be summarized later this year. Your assistance with this project is deeply appreciated.

Your assistance with this project is deeply appreciated.

Karen S. Schell

Karen Schell, DHSc, RRT, RRT-NPS, RRT-SDS, RPFT, RPSGT, AE-C, CTTS

AARC.Therapist@nbrc.org 10801 Mastin St., Suite 300, Overland Park, KS 66210 Unsubscribe - Unsubscribe Preferences

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Email Sent to Program Directors:



Dear FirstName LastName,

The AARC is conducting a human resource study of the respiratory therapist workforce. Accurate information about respiratory therapists and the places they work is critical for identifying workforce trends. Your assistance with this project is vital.

You should be able to complete the survey within 20 minutes. Survey participants can register to win an active AARC membership for one year.

Click on the link below to respond to the survey for your education program. If you have questions or experience difficulties, contact Jennifer Benavente (AARC.EdProg@nbrc.org).

Link to Education Program Survey

You are also encouraged to complete a survey of individual therapists and to share the opportunity with your faculty and alumni. Please share the link below:

https://www.surveymonkey.com/r/AARCTherapistSurvey2020

Both surveys will be available until **Sunday, September 27th**. Your assistance with this project is deeply appreciated.

Karen S. Schell

Karen Schell, DHSc, RRT, RRT-NPS, RRT-SDS, RPFT, RPSGT, AE-C, CTTS

AARC.EdProg@nbrc.org 10801 Mastin St., Suite 300, Overland Park, KS 66210 Unsubscribe - Unsubscribe Preferences

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Postcard for Acute Care Hospitals:





The AARC is conducting a human resource study with help from the NBRC to examine the respiratory therapist workforce. Accurate information about respiratory therapists and the places they work is critical for identifying workforce trends. Your assistance with this project is vital.

You should be able to complete the survey within 20 minutes. Survey participants can register to win an active AARC membership for one year.

Follow the link below to take the Acute Care Hospital survey for your institution. The response deadline is *Sunday, October 11*. If you have questions or experience difficulties, contact Jennifer Benavente (AARC.AcuteCare@ nbrc.org).

www.nbrc.org/acutecare

You are also encouraged to complete a survey of individual therapists and to share the opportunity with your coworkers. Please share the link below:

www.nbrc.org/therapist

The Therapist survey will be available until **Sunday, September 27**. Your assistance with this project is deeply appreciated.

Karen S. Schell

Karen Schell, DHSc, RRT, RRT-NPS, RRT-SDS, RPFT, RPSGT, AE-C, CTTS

NBRC (10801 Mastin St., Ste 300 Overland Park, KS 66210 PRSRT STD U.S. POSTAGE **PAID** Kansas City, MO 64108 Permit No. 2687

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Take the Human Resource Survey

Are you curious about how your salary compares with that earned by other therapists? Did you ever wonder how many therapists are involved in special procedures like conscious sedation and emergency intubation? The AARC's 2020 Respiratory Therapist Human Resources Study will answer these questions and many others that relate to the respiratory therapist workforce.

Social media post on AARC's Facebook, LinkedIn, and Twitter feeds on 9/15:



Social media post on AARC's Facebook, LinkedIn, and Twitter feeds on 9/22:



Mobile



Survey Extension Sent to Therapists:



Dear Firstname Lastname,

The deadline to respond has been extended! If you've already submitted your completed survey, thank you! If you haven't yet, please read on...

The AARC is conducting a human resource study of the respiratory therapist workforce. Accurate information about respiratory therapists and the places they work is critical for identifying workforce trends. Your assistance with this project is vital.

You should be able to complete the survey within 20 minutes. Survey participants can register to win one of three active AARC memberships for one year.

You can expand participation by forwarding this email to fellow therapists. Please hurry as the survey will only be available until **October 11, 2020.**

Click on the link below to start the survey. If you have questions or experience difficulties, contact Jennifer Benavente (AARC.Therapist@nbrc.org).

Link to Therapist Survey

Survey responses from what we hope to be a large, representative group of therapists will be summarized later this year. Your assistance with this project is deeply appreciated.

Your assistance with this project is deeply appreciated.

Karen S. Schell

Karen Schell, DHSc, RRT, RRT-NPS, RRT-SDS, RPFT, RPSGT, AE-C, CTTS

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Appendix C. Frequency Tables

Table 44. Respondents by State

Return to Figure 1. Choropleth of Active Therapists by State

		Frequenc y	Percent	Valid Percent	Cumulative Percent	Population Reported by State Agencies/Chapters
	AL	173	1.5	1.5	1.5	2,914
	AK	22	.2	.2	1.7	170
	AZ	275	2.4	2.4	4.2	4,153
	AR	152	1.3	1.3	5.5	2,123
	СА	915	7.9	8.1	13.6	23,680
	со	149	1.3	1.3	14.9	3,831
	ст	144	1.3	1.3	16.2	1,924
	DE	86	.7	.8	17.0	762
	DC	32	.3	.3	17.2	800
	FL	630	5.5	5.6	22.8	13,938
	GA	363	3.2	3.2	26.0	5,479
	н	32	.3	.3	26.3	793
	ID	73	.6	.6	27.0	1,091
	IL	440	3.8	3.9	30.9	5,553
	IN	354	3.1	3.1	34.0	5,240
Valid	IA	107	.9	.9	34.9	1,888
	ĸs	133	1.2	1.2	36.1	2,182
	КҮ	215	1.9	1.9	38.0	3,840
	LA	249	2.2	2.2	40.2	3,510
	ME	55	.5	.5	40.7	942
	MD	185	1.6	1.6	42.4	2,744
	МА	198	1.7	1.8	44.1	3,277
	мі	332	2.9	2.9	47.0	5,374
	MN	138	1.2	1.2	48.3	2,014
	MS	135	1.2	1.2	49.5	2,541
	МО	389	3.4	3.4	52.9	4,460
	мт	85	.7	.8	53.7	661
	NE	74	.6	.7	54.3	1,551
	NV	94	.8	.8	55.1	1,753
	NH	39	.3	.3	55.5	628
	NJ	197	1.7	1.7	57.2	3,450

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		Frequenc		Valid	Cumulative	Population Reported by State
		у	Percent	Percent	Percent	Agencies/Chapters
	NM	103	.9	.9	58.1	1,243
	NY	434	3.8	3.8	62.0	7,848
	NC	423	3.7	3.7	65.7	5,197
	ND	30	.3	.3	66.0	644
	он	491	4.3	4.3	70.3	8,820
	ок	152	1.3	1.3	71.7	2,423
	OR	133	1.2	1.2	72.9	1,917
	РА	510	4.4	4.5	77.4	7,379
	RI	45	.4	.4	77.8	629
	sc	191	1.7	1.7	79.5	2,956
	SD	42	.4	.4	79.8	528
	TN	320	2.8	2.8	82.7	4,958
	тх	931	8.1	8.2	90.9	15,869
	UT	137	1.2	1.2	92.1	1,715
	νт	23	.2	.2	92.3	457
	VA	318	2.8	2.8	95.1	4,344
	WA	170	1.5	1.5	96.7	3,046
	wv	110	1.0	1.0	97.6	1,864
	wi	215	1.9	1.9	99.5	2,843
	WY	34	.3	.3	99.8	784
	PR	14	.1	.1	100.0	2,727
	Guam	3	.0	.0	100.0	
	Northern					
	Marianas	2	.0	.0	100.0	
	Islands					
	Total	11,296	98.1	100.0		191,457
Missing	System	220	1.9			
Total		11,516	100.0			

Table 45. Distribution of respondents by region

Return to Figure 2

		_	-	Valid	Cumulative	Population Reported by
		Frequency	Percent	Percent	Percent	State Agencies/Chapters
	Northeast	1,645	14.3	14.6	14.6	26,534
	South	4,665	40.5	41.4	56.0	76,262
Valid	Midwest	2,745	23.8	24.3	80.3	41,097
	West	2,222	19.3	19.7	100.0	44,837
	Total	11,277	97.9	100.0		
	Outside US	19	.2			2,727
Missing	System	220	1.9			
	Total	239	2.1			
Total		11,516	100.0			191,457

Northeast – MA, RI, NH, ME, VT, CT, NJ, NY, PA South – DC, DE, MD, VA, WV, NC, SC, GA, FL, AL, TN, MS, KY, LA, AR, OK, TX Midwest – OH, IN, MI, WI, IL, IA, MN, SD, ND, MO, KS, NE West – MT, CO, WY, ID, UT, AZ, NM, NV, CA, HI, OR, WA, AK

Table 46. Distribution by census division

Return to Figure 3. Distribution by division

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 - New England	504	4.4	4.5	4.5
	2 - Middle Atlantic	1,141	9.9	10.1	14.6
	3 - South Atlantic	2,338	20.3	20.7	35.3
	4 - East North Central	1,832	15.9	16.2	51.6
	5 - West North Central	913	7.9	8.1	59.7
Valid	6 - East South Central	843	7.3	7.5	67.1
	7 - West South Central	1,484	12.9	13.2	80.3
	8 - Mountain	950	8.2	8.4	88.7
	9 - Pacific	1,272	11.0	11.3	100.0
	Total	11,277	97.9	100.0	
	Outside US	19	.2		
Missing	System	220	1.9		
	Total	239	2.1		
Total		11,516	100.0		

1 – ME, VT, NH, MA, RI, CT; 2 – NY, PA, NJ; 3 – WV, VA, MD, DC, DE, NC, SC, GA, FL; 4 – MI, OH, IN, IL, WI; 5 – ND, SD, MN, NE, IA, KS, MO; 6 – KY, TN, MS, AL; 7 – OK, AR, LA, TX; 8 – MT, ID, WY, NV, UT, CO, AZ, NM; 9 – WA, OR, CA, AK, HI

Table 47. Year of intended departure from respiratory therapist workforce

Return to Figure 8.

		_		Valid	Cumulative	Projected cumulative number from 2020 population that will have left
		Frequency	Percent	Percent	Percent	the profession*
	2019	209	1.8	1.9	1.9	3,638
	2020	404	3.5	3.6	5.5	10,530
	2021	431	3.7	3.9	9.3	17,806
	2022	509	4.4	4.6	13.9	26,613
	2023	371	3.2	3.3	17.2	32,931
	2024	327	2.8	2.9	20.1	38,483
-	2025	945	8.2	8.5	28.6	54,757
	2026	277	2.4	2.5	31.1	59,543
	2027	296	2.6	2.6	33.7	64,521
	2028	247	2.1	2.2	35.9	68,733
	2029	97	.8	.9	36.8	70,456
	2030	1,288	11.2	11.5	48.3	92,474
	2031	86	.7	.8	49.1	94,005
	2032	200	1.7	1.8	50.9	97,452
	2033	117	1.0	1.0	51.9	99,366
	2034	90	.8	.8	52.7	100,898
Valid	2035	822	7.1	7.4	60.1	115,066
	2036	85	.7	.8	60.8	116,406
	2037	106	.9	.9	61.8	118,320
	2038	76	.7	.7	62.4	119,469
	2039	37	.3	.3	62.8	120,235
	2040	1,261	10.9	11.3	74.1	141,870
	2041	59	.5	.5	74.6	142,827
	2042	99	.9	.9	75.5	144,550
	2043	76	.7	.7	76.1	145,699
	2044	50	.4	.4	76.6	146,656
	2045	574	5.0	5.1	81.7	156,420
	2046	45	.4	.4	82.1	157,186
	2047	51	.4	.5	82.6	158,143
	2048	54	.5	.5	83.1	159,101
	2049	29	.3	.3	83.3	159,484
	2050	864	7.5	7.7	91.1	174,417
	2051	28	.2	.3	91.3	174,800

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						Projected cumulative number from 2020
				Valid	Cumulative	population that will have left
	F	Frequency	Percent	Percent	Percent	the profession*
	2052	45	.4	.4	91.7	175,566
	2053	40	.3	.4	92.1	176,332
	2054	28	.2	.3	92.3	176,712
	2055	245	2.1	2.2	94.5	180,927
	2056	21	.2	.2	94.7	181,310
	2057	27	.2	.2	94.9	181,693
	2058	28	.2	.3	95.2	182,267
	2059	11	.1	.1	95.3	182,459
	2060	235	2.0	2.1	97.4	186,479
	2061	5	.0	.0	97.4	186,479
	2062	3	.0	.0	97.5	186,671
	2063	9	.1	.1	97.5	186,671
	2064	4	.0	.0	97.6	186,862
	2065	46	.4	.4	98.0	187,628
	2066	5	.0	.0	98.0	187,628
	2067	2	.0	.0	98.1	187,819
	2068	2	.0	.0	98.1	187,819
	2069	1	.0	.0	98.1	187,819
	2070	28	.2	.3	98.3	188,202
	2075	7	.1	.1	98.4	188,394
	2077	2	.0	.0	98.4	188,394
	2080	17	.1	.2	98.6	188,777
	2082	1	.0	.0	98.6	188,777
	2083	1	.0	.0	98.6	188,777
	2084	1	.0	.0	98.6	188,777
	2085	4	.0	.0	98.6	188,777
	2088	1	.0	.0	98.6	188,777
	2090	5	.0	.0	98.7	188,968
	2099	2	.0	.0	98.7	188,968
	2100	146	1.3	1.3	100.0	191,457
	Total	11,182	97.1	100.0		
Missing	System	334	2.9			
Total		11,516	100.0			

Table 48. Hours worked per week at Primary job in Acute Care Hospital

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	187	1.8	2.3	2.3
	2	23	.2	.3	2.5
	3	31	.3	.4	2.9
	4	23	.2	.3	3.2
	5	21	.2	.3	3.4
	6	16	.2	.2	3.6
	7	8	.1	.1	3.7
	8	80	.8	1.0	4.7
	9	8	.1	.1	4.8
	10	38	.4	.5	5.2
	11	5	.0	.1	5.3
	12	290	2.7	3.5	8.8
	13	9	.1	.1	8.9
	14	8	.1	.1	9.0
	15	15	.1	.2	9.2
	16	45	.4	.5	9.7
Valid	17	3	.0	.0	9.8
valid	18	6	.1	.1	9.8
	19	4	.0	.0	9.9
	20	77	.7	.9	10.8
	21	2	.0	.0	10.8
	22	5	.0	.1	10.9
	23	4	.0	.0	10.9
	24	445	4.2	5.4	16.3
	25	18	.2	.2	16.5
	26	10	.1	.1	16.6
	27	4	.0	.0	16.7
	28	15	.1	.2	16.9
	29	1	.0	.0	16.9
	30	130	1.2	1.6	18.5
	31	1	.0	.0	18.5
	32	229	2.2	2.8	21.2
	33	4	.0	.0	21.3
	34	16	.2	.2	21.5

	Return to	Table 6. Hours	worked	per week at	jobs at Acute	Care Hospital	١.
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		F	Davaant	Valid	Cumulative
		Frequency	Percent	Percent	Percent
	35	50	.5	.6	22.1
	36	3,475	32.9	41.9	63.9
	37	87	.8	1.0	65.0
	38	130	1.2	1.6	66.6
	39	19	.2	.2	66.8
	40	1,798	17.0	21.7	88.5
	41	7	.1	.1	88.5
	42	52	.5	.6	89.2
	43	6	.1	.1	89.2
	44	50	.5	.6	89.8
	45	105	1.0	1.3	91.1
	46	13	.1	.2	91.3
	47	5	.0	.1	91.3
	48	286	2.7	3.4	94.8
	49	4	.0	.0	94.8
	50	174	1.6	2.1	96.9
	52	7	.1	.1	97.0
	53	1	.0	.0	97.0
	54	2	.0	.0	97.0
	55	19	.2	.2	97.3
	56	3	.0	.0	97.3
	59	1	.0	.0	97.3
	60	69	.7	.8	98.1
	64	5	.0	.1	98.2
	65	149	1.4	1.8	100.0
	Total	8 298	78.5	100.0	
Missina	System	2.270	21.5		
Total	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10,568	100.0		

Return to Figure 10.

			Frequency	Percent	Valid Percent	Cumulative Percent
	1		37	4	3.6	3.6
	2		25	2	2 4	6.1
	3		9	.1	.9	6.9
	4		34	.3	3.3	10.3
	5		16	.2	1.6	11.8
	6		37	.4	3.6	15.4
	7		2	.0	.2	15.6
	8		104	1.0	10.2	25.8
	9		2	.0	.2	26.0
	10		28	.3	2.7	28.7
	11		6	.1	.6	29.3
	12		470	4.4	45.9	75.2
	13		2	.0	.2	75.4
	15		4	.0	.4	75.8
	16		27	.3	2.6	78.4
Valid	18		5	.0	.5	78.9
	20		28	.3	2.7	81.6
	22		1	.0	.1	81.7
	24		129	1.2	12.6	94.3
	25		4	.0	.4	94.7
	26		2	.0	.2	94.9
	27		1	.0	.1	95.0
	30		5	.0	.5	95.5
	32		3	.0	.3	95.8
	33	-	1	.0	.1	95.9
	35	-	1	.0	.1	96.0
	36	-	30	.3	2.9	98.9
	37	-	1	.0	.1	99.0
	40	-	8	.1	.8	99.8
	48		2	.0	.2	100.0
	Total		1,024	9.7	100.0	
Missing	System		9,544	90.3		
Total			10,568	100.0		

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				Valid	Cumulative
	- r	Frequency	Percent	Percent	Percent
	1	50	.5	7.8	7.8
	2	15	.1	2.3	10.1
	3	7	.1	1.1	11.2
	4	6	.1	.9	12.2
	5	11	.1	1.7	13.9
	6	7	.1	1.1	15.0
	7	2	.0	.3	15.3
	8	28	.3	4.4	19.7
	9	1	.0	.2	19.8
	10	14	.1	2.2	22.0
	12	12	.1	1.9	23.9
	13	1	.0	.2	24.0
	15	5	.0	.8	24.8
	16	5	.0	.8	25.6
	17	1	.0	.2	25.7
	18	1	.0	.2	25.9
Valid	20	24	.2	3.7	29.6
valid	22	2	.0	.3	30.0
	24	9	.1	1.4	31.4
	26	1	.0	.2	31.5
	28	3	.0	.5	32.0
	30	7	.1	1.1	33.1
	32	14	.1	2.2	35.3
	34	2	.0	.3	35.6
	35	6	.1	.9	36.5
	36	12	.1	1.9	38.4
	37	1	.0	.2	38.5
	38	4	.0	.6	39.2
	40	280	2.6	43.7	82.8
	41	3	.0	.5	83.3
	42	12	.1	1.9	85.2
	43	6	.1	.9	86.1
	44	6	.1	.9	87.1
	45	35	.3	5.5	92.5

Return to Table 7. Hours worked per week in DME/Home Care

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				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	47	2	.0	.3	92.8
	48	2	.0	.3	93.1
	50	24	.2	3.7	96.9
	54	1	.0	.2	97.0
	55	3	.0	.5	97.5
	56	2	.0	.3	97.8
	60	5	.0	.8	98.6
	62	1	.0	.2	98.8
	63	1	.0	.2	98.9
	65	7	.1	1.1	100.0
	Total	641	6.1	100.0	
Missing	System	9,927	93.9		
Total		10,568	100.0		

Table 51. Hours worked per week at Second job in DME/Home Care

Return to Figure 12.

				Valid	Cumulative
	-	Frequency	Percent	Percent	Percent
	1	24	.2	16.8	16.8
	2	12	.1	8.4	25.2
	3	9	.1	6.3	31.5
	4	23	.2	16.1	47.6
	5	6	.1	4.2	51.7
	6	6	.1	4.2	55.9
	8	16	.2	11.2	67.1
	10	10	.1	7.0	74.1
Valia	12	8	.1	5.6	79.7
valid	14	1	.0	.7	80.4
	15	1	.0	.7	81.1
	16	9	.1	6.3	87.4
	18	1	.0	.7	88.1
	20	7	.1	4.9	93.0
	24	3	.0	2.1	95.1
	25	1	.0	.7	95.8
	30	2	.0	1.4	97.2
	40	2	.0	1.4	98.6

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		Frequency	Percent	Valid Percent	Cumulative Percent
	50	1	.0	.7	99.3
	55	1	.0	.7	100.0
	Total	143	1.4	100.0	
Missing	System	10,425	98.6		
Total		10,568	100.0		

Table 52. Hours worked per week at Primary job in Long Term Care

Return to Figure 13.

		Frequency	Percent	Valid Percent	Cumulative
		52	5	5.8	5.8
	2	17		1 9	7 7
	2	13	.2	1.0	0 1
	<u>л</u>	13	. 1	1.7	10.6
	5	15	. 1	1.7	12.0
	6	10	. 1	1.1	13.3
	7	2		2	13.6
	۲ و	<u>-</u> 32	 3	.2	17.1
	0	32		<u></u>	17.1
	9 10	10			10.6
	10	19	.2		19.0
	10	۱ ۵۵	.0		19.1 27.0
	12	1	.0	1.3	27.0
Valid	13	1	.0	. 1	27.1
	14	2	.0	.2	21.4
	15	3	.0	.3	21.1
	16	10	.1	1.1	28.8
	18	2	.0	.2	29.0
	20	14	.1	1.6	30.6
	21	3	.0	.3	30.9
	22	1	.0	.1	31.0
	24	67	.6	7.5	38.5
	25	3	.0	.3	38.8
	26	1	.0	.1	38.9
	28	2	.0	.2	39.2
	30	20	.2	2.2	41.4
	32	16	.2	1.8	43.2

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				Valid	Cumulative
	_	Frequency	Percent	Percent	Percent
	34	2	.0	.2	43.4
	35	7	.1	.8	44.2
	36	222	2.1	24.7	68.9
	37	7	.1	.8	69.6
	38	14	.1	1.6	71.2
	40	173	1.6	19.2	90.4
	41	1	.0	.1	90.5
	42	3	.0	.3	90.9
	43	1	.0	.1	91.0
	44	3	.0	.3	91.3
	45	20	.2	2.2	93.5
	46	2	.0	.2	93.8
	48	24	.2	2.7	96.4
	50	10	.1	1.1	97.6
	52	2	.0	.2	97.8
	57	1	.0	.1	97.9
	60	6	.1	.7	98.6
	65	13	.1	1.4	100.0
	Total	899	8.5	100.0	
Missing	System	9,669	91.5		
Total		10,568	100.0		

Table 53. Hours worked per week at Second job in Long Term Care

Return to Figure 14.

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	6	.1	2.4	2.4
	2	7	.1	2.8	5.1
	3	3	.0	1.2	6.3
	4	15	.1	5.9	12.2
Valid	5	5	.0	2.0	14.2
	6	14	.1	5.5	19.7
	8	27	.3	10.6	30.3
	10	9	.1	3.5	33.9
	12	98	.9	38.6	72.4

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				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	14	1	.0	.4	72.8
	15	2	.0	.8	73.6
	16	10	.1	3.9	77.6
	20	7	.1	2.8	80.3
	21	1	.0	.4	80.7
	24	35	.3	13.8	94.5
	25	1	.0	.4	94.9
	30	1	.0	.4	95.3
	32	1	.0	.4	95.7
	33	1	.0	.4	96.1
	36	7	.1	2.8	98.8
	40	1	.0	.4	99.2
	48	2	.0	.8	100.0
	Total	254	2.4	100.0	
Missing	System	10,314	97.6		
Total		10,568	100.0		

Table 54. Hours worked per week at Primary job in Education

Return to Figure 15.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	38	.4	5.7	5.7
	2	39	.4	5.8	11.5
	3	17	.2	2.5	14.1
	4	34	.3	5.1	19.2
	5	22	.2	3.3	22.5
	6	16	.2	2.4	24.9
	7	2	.0	.3	25.1
Valid	8	37	.4	5.5	30.7
	9	4	.0	.6	31.3
	10	41	.4	6.1	37.4
	11	1	.0	.1	37.6
	12	25	.2	3.7	41.3
	13	1	.0	.1	41.5
	14	1	.0	.1	41.6
	15	6	.1	.9	42.5

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		Frequency	Percent	Valid Percent	Cumulative Percent
	16	16	.2	2.4	44.9
	18	1	.0	.1	45.1
	19	1	.0	.1	45.2
	20	18	.2	2.7	47.9
	22	1	.0	.1	48.1
	24	11	.1	1.6	49.7
	25	7	.1	1.0	50.7
	26	2	.0	.3	51.0
	28	1	.0	.1	51.2
	29	1	.0	.1	51.3
	30	12	.1	1.8	53.1
	32	12	.1	1.8	54.9
	34	1	.0	.1	55.1
	35	9	.1	1.3	56.4
	36	12	.1	1.8	58.2
	37	2	.0	.3	58.5
	38	2	.0	.3	58.8
	40	197	1.9	29.5	88.3
	42	1	.0	.1	88.5
	44	2	.0	.3	88.8
	45	21	.2	3.1	91.9
	48	4	.0	.6	92.5
	50	28	.3	4.2	96.7
	53	1	.0	.1	96.9
	55	4	.0	.6	97.5
	58	1	.0	.1	97.6
	60	10	.1	1.5	99.1
	65	6	.1	.9	100.0
	Total	668	6.3	100.0	
Missing	System	9,900	93.7		
Total		10,568	100.0		

Table 55. Hours worked per week at Second job in Education

Return to Figure 16.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	11	.1	5.3	5.3
	2	13	.1	6.2	11.5
	3	14	.1	6.7	18.2
	4	23	.2	11.0	29.2
	5	8	.1	3.8	33.0
	6	19	.2	9.1	42.1
	7	3	.0	1.4	43.5
	8	36	.3	17.2	60.8
	9	2	.0	1.0	61.7
Valid	10	20	.2	9.6	71.3
	12	27	.3	12.9	84.2
	14	3	.0	1.4	85.6
	15	2	.0	1.0	86.6
	16	9	.1	4.3	90.9
	18	2	.0	1.0	91.9
	20	12	.1	5.7	97.6
	24	2	.0	1.0	98.6
	40	3	.0	1.4	100.0
	Total	209	2.0	100.0	
Missing	System	10,359	98.0		
Total		10,568	100.0		

Table 56. Hours worked per week at Primary job in Manufacturing/Distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	.2	18.0	18.0
	2	6	.1	5.4	23.4
	3	2	.0	1.8	25.2
	4	2	.0	1.8	27.0
	5	3	.0	2.7	29.7
	6	1	.0	.9	30.6
	8	1	.0	.9	31.5
	10	3	.0	2.7	34.2

Return to Table 10. Hours worked per week in Manufacturing/Distribution

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		Frequency	Percent	Valid Percent	Cumulative Percent
	16	1	.0	.9	35.1
	20	2	.0	1.8	36.9
	24	2	.0	1.8	38.7
	33	1	.0	.9	39.6
	36	1	.0	.9	40.5
	40	46	.4	41.4	82.0
	45	2	.0	1.8	83.8
	46	1	.0	.9	84.7
	50	5	.0	4.5	89.2
	55	4	.0	3.6	92.8
	60	6	.1	5.4	98.2
	65	2	.0	1.8	100.0
	Total	111	1.1	100.0	
Missing	System	10,457	98.9		
Total		10,568	100.0		

Table 57. Hours worked per week at Second job in Manufacturing/Distribution

Return to Figure 18.

		F	D	Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	6	.1	20.0	20.0
	2	6	.1	20.0	40.0
	3	2	.0	6.7	46.7
	4	2	.0	6.7	53.3
	5	4	.0	13.3	66.7
	6	1	.0	3.3	70.0
Valid	8	2	.0	6.7	76.7
	10	2	.0	6.7	83.3
	14	1	.0	3.3	86.7
	20	2	.0	6.7	93.3
	32	1	.0	3.3	96.7
	40	1	.0	3.3	100.0
	Total	30	.3	100.0	
Missing	System	10,538	99.7		
Total		10,568	100.0		

Table 58. Hours worked per week at Primary job for Non-profit association

Return to Figure 19.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	22	.2	9.5	9.5
	2	10	.1	4.3	13.8
	3	3	.0	1.3	15.1
	4	4	.0	1.7	16.8
	5	8	.1	3.4	20.3
	6	3	.0	1.3	21.6
	7	3	.0	1.3	22.8
	8	6	.1	2.6	25.4
	9	1	.0	.4	25.9
	10	7	.1	3.0	28.9
	11	3	.0	1.3	30.2
	12	8	.1	3.4	33.6
	13	2	.0	.9	34.5
	17	2	.0	.9	35.3
	20	3	.0	1.3	36.6
	21	2	.0	.9	37.5
Valid	23	1	.0	.4	37.9
	24	6	.1	2.6	40.5
	25	2	.0	.9	41.4
	30	3	.0	1.3	42.7
	32	6	.1	2.6	45.3
	35	2	.0	.9	46.1
	36	59	.6	25.4	71.6
	38	4	.0	1.7	73.3
	40	42	.4	18.1	91.4
	42	1	.0	.4	91.8
	44	1	.0	.4	92.2
	45	2	.0	.9	93.1
	48	6	.1	2.6	95.7
	50	4	.0	1.7	97.4
	55	1	.0	.4	97.8
	60	2	.0	.9	98.7
	65	3	.0	1.3	100.0

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		Frequency	Percent	Valid Percent	Cumulative Percent
	Total	232	2.2	100.0	
Missing	System	10,336	97.8		
Total		10,568	100.0		

Table 59. Hours worked per week at Second job in for Non-profit association

Return to Figure 20.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	7	.1	14.9	14.9
	2	6	.1	12.8	27.7
	3	2	.0	4.3	31.9
	4	5	.0	10.6	42.6
	5	5	.0	10.6	53.2
	6	4	.0	8.5	61.7
	7	1	.0	2.1	63.8
	8	2	.0	4.3	68.1
Valid	9	1	.0	2.1	70.2
	10	6	.1	12.8	83.0
	12	1	.0	2.1	85.1
	13	1	.0	2.1	87.2
	16	2	.0	4.3	91.5
	20	2	.0	4.3	95.7
	24	1	.0	2.1	97.9
	25	1	.0	2.1	100.0
	Total	47	.4	100.0	
Missing	System	10,521	99.6		
Total		10,568	100.0		

Table 60. Hours worked per week at Primary job in an Outpatient facility

Return to Figure 21.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	25	.2	4.9	4.9
	2	7	.1	1.4	6.3
	3	3	.0	.6	6.8
	4	14	.1	2.7	9.6
	5	6	.1	1.2	10.8
	6	3	.0	.6	11.4
	7	4	.0	.8	12.1
	8	29	.3	5.7	17.8
	9	5	.0	1.0	18.8
	10	16	.2	3.1	21.9
	12	9	.1	1.8	23.7
	13	1	.0	.2	23.9
	15	4	.0	.8	24.7
	16	16	.2	3.1	27.8
	18	2	.0	.4	28.2
	20	29	.3	5.7	33.9
	21	1	.0	.2	34.1
Valid	22	2	.0	.4	34.4
	24	23	.2	4.5	38.9
	25	2	.0	.4	39.3
	26	1	.0	.2	39.5
	27	2	.0	.4	39.9
	28	4	.0	.8	40.7
	30	15	.1	2.9	43.6
	32	18	.2	3.5	47.2
	34	2	.0	.4	47.6
	35	2	.0	.4	47.9
	36	57	.5	11.2	59.1
	37	1	.0	.2	59.3
	38	5	.0	1.0	60.3
	39	2	.0	.4	60.7
	40	180	1.7	35.2	95.9
	42	1	.0	.2	96.1
	44	1	.0	.2	96.3

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		Frequency	Percent	Valid Percent	Cumulative Percent
	45	5	.0	1.0	97.3
	48	6	.1	1.2	98.4
	50	2	.0	.4	98.8
	65	6	.1	1.2	100.0
	Total	511	4.8	100.0	
Missing	System	10,057	95.2		
Total		10,568	100.0		

Table 61. Hours worked per week at Second job in an Outpatient facility

Return to Figure 22.

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	3	.0	5.8	5.8
	2	5	.0	9.6	15.4
	3	3	.0	5.8	21.2
	4	2	.0	3.8	25.0
	6	1	.0	1.9	26.9
	7	2	.0	3.8	30.8
	8	11	.1	21.2	51.9
) / - I' -I	10	2	.0	3.8	55.8
valid	11	1	.0	1.9	57.7
	12	10	.1	19.2	76.9
	13	1	.0	1.9	78.8
	15	2	.0	3.8	82.7
	16	6	.1	11.5	94.2
	20	1	.0	1.9	96.2
	24	2	.0	3.8	100.0
	Total	52	.5	100.0	
Missing	System	10516	99.5		
Total		10568	100.0		

Table 62. Hours worked per week at Primary job in a Physician's office

Return to Figure 23.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	24	.2	9.4	9.4
	2	6	.1	2.3	11.7
	3	2	.0	.8	12.5
	4	3	.0	1.2	13.7
	5	4	.0	1.6	15.2
	6	2	.0	.8	16.0
	7	3	.0	1.2	17.2
	8	12	.1	4.7	21.9
	9	1	.0	.4	22.3
	10	8	.1	3.1	25.4
	11	1	.0	.4	25.8
	12	3	.0	1.2	27.0
	15	2	.0	.8	27.7
	16	8	.1	3.1	30.9
	18	1	.0	.4	31.3
	20	15	.1	5.9	37.1
Valid	23	1	.0	.4	37.5
valid	24	7	.1	2.7	40.2
	27	2	.0	.8	41.0
	28	4	.0	1.6	42.6
	30	8	.1	3.1	45.7
	32	16	.2	6.3	52.0
	34	2	.0	.8	52.7
	35	2	.0	.8	53.5
	36	6	.1	2.3	55.9
	37	2	.0	.8	56.6
	38	5	.0	2.0	58.6
	40	88	.8	34.4	93.0
	42	2	.0	.8	93.8
	43	1	.0	.4	94.1
	44	1	.0	.4	94.5
	45	6	.1	2.3	96.9
	46	1	.0	.4	97.3
	47	1	.0	.4	97.7

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		Frequency	Percent	Valid Percent	Cumulative Percent
	50	1	.0	.4	98.0
	55	1	.0	.4	98.4
	60	2	.0	.8	99.2
	65	2	.0	.8	100.0
	Total	256	2.4	100.0	
Missing	System	10,312	97.6		
Total		10,568	100.0		

Table 63. Hours worked per week at Second job in a Physician's office

Return to Figure 24.

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	5	.0	13.5	13.5
	2	3	.0	8.1	21.6
	4	2	.0	5.4	27.0
	5	2	.0	5.4	32.4
	6	6	.1	16.2	48.6
	8	5	.0	13.5	62.2
	9	1	.0	2.7	64.9
Valid	10	4	.0	10.8	75.7
	12	1	.0	2.7	78.4
	15	1	.0	2.7	81.1
	16	3	.0	8.1	89.2
	20	1	.0	2.7	91.9
	23	1	.0	2.7	94.6
	25	2	.0	5.4	100.0
	Total	37	.4	100.0	
Missing	System	10,531	99.6		
Total		10,568	100.0		

				Valid	Cumulative
	-	Frequency	Percent	Percent	Percent
	1	18	.2	14.3	14.3
	2	2	.0	1.6	15.9
	3	5	.0	4.0	19.8
	4	1	.0	.8	20.6
	5	4	.0	3.2	23.8
	8	4	.0	3.2	27.0
	9	1	.0	.8	27.8
	10	3	.0	2.4	30.2
	12	14	.1	11.1	41.3
	16	1	.0	.8	42.1
	20	2	.0	1.6	43.7
Valid	24	6	.1	4.8	48.4
	30	1	.0	.8	49.2
	32	1	.0	.8	50.0
	36	38	.4	30.2	80.2
	37	1	.0	.8	81.0
	39	1	.0	.8	81.7
	40	6	.1	4.8	86.5
	48	10	.1	7.9	94.4
	50	2	.0	1.6	96.0
	60	1	.0	.8	96.8
	65	4	.0	3.2	100.0
	Total	126	1.2	100.0	
Missing	System	10,442	98.8		
Total		10,568	100.0		

Return to	Table 14.	Hours worked	per week for a	Reaistrv

Table 65. Hours worked per week at Second job for a Registry

Return to Figure 26.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	10	.1	19.2	19.2
	2	3	.0	5.8	25.0
Valid	3	2	.0	3.8	28.8
	4	1	.0	1.9	30.8

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		Frequency	Percent	Valid Percent	Cumulative Percent
	6	1	.0	1.9	32.7
	7	1	.0	1.9	34.6
	8	6	.1	11.5	46.2
	10	3	.0	5.8	51.9
	12	11	.1	21.2	73.1
	15	1	.0	1.9	75.0
	20	1	.0	1.9	76.9
	24	6	.1	11.5	88.5
	25	1	.0	1.9	90.4
	36	2	.0	3.8	94.2
	48	1	.0	1.9	96.2
	50	2	.0	3.8	100.0
	Total	52	.5	100.0	
Missing	System	10,516	99.5		
Total		10,568	100.0		

Table 66. Job satisfaction

Return to Figure 37.

		Frequency	Percent	Valid Percent	Cumulative
	r	пециенсу	Tercent	I elcent	I el cent
	0	444	3.9	5.3	5.3
	1	299	2.6	3.6	8.9
	2	660	5.7	7.9	16.8
Valid	3	1,994	17.3	23.8	40.6
	4	2,525	21.9	30.2	70.8
	5	2,448	21.3	29.2	100.0
	Total	8,370	72.7	100.0	
Missing	System	3,146	27.3		
Total		11,516	100.0		

		-	Percen	Valid	Cumulativ
		Frequency	t	Percent	e Percent
	Compensation and benefits	2,600	22.6	30.0	30.0
	Department administration and supervision	1,800	15.6	20.8	50.8
	Involvement in operational decisions	481	4.2	5.6	56.3
Valid	Involvement in patient care decisions	397	3.4	4.6	60.9
	Opportunities for advancement	1,371	11.9	15.8	76.8
	Range of respiratory care services	510	4.4	5.9	82.6
	Workload	1,504	13.1	17.4	100.0
	Total	8,663	75.2	100.0	
Missing	System	2,853	24.8		
Total		11,516	100.0		

Return to With which of the following are you LEAST satisfied with your primary job?

Table 68. Strongest reason for employment change

Return to If you have changed employers within the last five years, what was the strongest reason?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Compensation and benefits	912	7.9	22.8	22.8
	Department administration and supervision	952	8.3	23.8	46.5
	Involvement in operational decisions	61	.5	1.5	48.0
Valid	Involvement in patient care decisions	94	.8	2.3	50.4
	Opportunities for advancement	560	4.9	14.0	64.3
	Range of respiratory care services	170	1.5	4.2	68.6
	Relocation	887	7.7	22.1	90.7
	Workload	372	3.2	9.3	100.0
	Total	4,008	34.8	100.0	
Missing	System	7,508	65.2		
Total		11,516	100.0		

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Table 69. Job titles

Return to Figure 40.

				Valid	Cumulative	Projected
	r	Frequency	Percent	Percent	Percent	Population*
	Manager/Director or a Dept. Program. or System	838	7.3	9.4	9.4	13,932
	Supervisor	715	6.2	8.0	17.4	11,887
	Staff Therapist	5,521	47.9	61.8	79.1	91,788
	Clinical Specialist	525	4.6	5.9	85.0	8,728
	Department Educator	128	1.1	1.4	86.4	2,128
	Disease Manager/Patient Educator	122	1.1	1.4	87.8	2,028
	Quality/Compliance Coordinator/Manager	52	.5	.6	88.4	865
	Informatics Specialist (e.g., Clinical Analyst, Information Specialist)	28	.2	.3	88.7	466
Valid	Pulmonary Function Technologist	359	3.1	4.0	92.7	5,968
	Sleep Technologist	91	.8	1.0	93.7	1,513
	Research Coordinator/Associate	24	.2	.3	94.0	399
	Academic Educator (e.g., PD, DCE, faculty)	197	1.7	2.2	96.2	3,275
	Industry Clinical Specialist, Representative or Salesperson	77	.7	.9	97.1	1,280
	ECMO/ECLS Specialist	36	.3	.4	97.5	599
	Cardiac/Pulmonary Rehabilitation	37	.3	.4	97.9	615
	Transport/Flight Therapist	47	.4	.5	98.4	781
	Other	143	1.2	1.6	100.0	2,377
	Total	8,940	77.6	100.0		
Missing	System	2,576	22.4			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457, where 191,457 = number of active therapists in total population.

Table 70. NBRC credential maintenance requirement by employer

Return to Figure 41.

		Frequency	Percent	Valid Percent	Cumulative Percent	Projected Population*
	Yes	6,927	60.2	78.1	78.1	115,163
Valid	No	1,942	16.9	21.9	100.0	32,286
	Total	8,869	77.0	100.0		
Missing	System	2,647	23.0			
Total		11,516	100.0			

* Projected total does not equal the sum across NBRC credential maintenance requirement due to cases with missing data. Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population.

Table 71. Respiratory therapy training/education

Return to <u>Which of</u> the following best describes how you learned to perform in the role of a respiratory therapist?

		Frequency	Percent	Valid Percent	Cumulative Percent	Population Projection*
	On-the-job training	1,314	11.4	14.9	14.9	21,846
	In a program that prepared me for the CRT credential only	1,001	8.7	11.3	26.2	16,642
Valid	In a program that prepared me for the RRT credential	6,510	56.5	73.8	100.0	108,231
	Total	8,825	76.6	100.0		
Missing	System	2,691	23.4			
Total		11,516	100.0			

* Projected training = (Frequency/11,516) x 191,457, where 191,457 = number of active therapists in total population. Projected total does not equal the sum across training due to missing data for training.

Table 72. Degree earned when eligible for credential

Return to <u>If you</u> earned a college degree when you became eligible for your respiratory therapy credential, what type of degree was it?

		Frequency	Percent	Valid Percent	Cumulative Percent	Projected Population*
	Associate	6,748	58.6	81.8	81.8	112,188
	Bachelors	1,406	12.2	17.0	98.8	23,375
Valid	Masters	97	.8	1.2	100.0	1,613
	Total	8,251	71.6	100.0		
Missing	System	3,265	28.4			
Total		11,516	100.0			

* Projected total does not equal the sum due to missing cases. Projected training = (Frequency/11,516 x 191,457 where 191,457 = number of active therapists in total population.

Table 73. Highest academic level achieved

		Frequency	Percent	Valid Percent	Cumulative Percent	Projected Population*
	Some HS but no diploma	5	.0	.1	.1	83
	HS diploma/GED	58	.5	.7	.7	964
	Some college but no degree	355	3.1	4.0	4.7	5,902
Valid	Associates	4,529	39.3	51.3	56.1	75,296
	Bachelors	2,811	24.4	31.9	87.9	46,734
	Masters	962	8.4	10.9	98.8	15,994
	Doctorate	102	.9	1.2	100.0	1,696
	Total	8,822	76.6	100.0		
Missing	System	2,694	23.4			
Total		11,516	100.0			

Return to What is the highest academic level you have achieved?

* Projected total does not equal the sum due to missing cases. Projected academic level = (Frequency/11,516 x 191,457 where 191,457 = number of active therapists in total population.

Table 74. Baccalaureate or Graduate degree in health-related field

*

Return to Do you hold a Baccalaureate or graduate degree in a health-related field?

		Fraguanay	Dercent	Valid	Cumulative	Project
		Frequency	Percent	Percent	Percent	Population
	Yes	2,854	24.8	32.1	32.1	47,449
Valid	No	6,036	52.4	67.9	100.0	100,350
	Total	8,890	77.2	100.0		
Missing	System	2,626	22.8			
Total		11,516	100.0			

Projected total does not equal the sum across academic levels due to missing cases. Projected academic level = (Frequency/11,516) x191,457 where 191,457 = number of active therapists in total population.

		Frequency	Percent	Valid Percent	Cumulative Percent	Population Projection*
	Health Sciences	608	5.3	22.3	22.3	10,575
	Healthcare Administration	449	3.9	16.5	38.7	7,810
	Healthcare Mgmt	190	1.6	7.0	45.7	3,305
	Public Health	107	.9	3.9	49.6	1,861
	Resp Therapy	1,227	10.7	45.0	94.6	21,342
) (- 1: -1	Nursing	18	.2	.7	95.3	313
Valid	Biology/Chemistry	42	.4	1.5	96.8	731
	Medicine	15	.1	.5	97.4	261
	Health Informatics	10	.1	.4	97.7	174
	Psychology/Mental Health	25	.2	.9	98.6	435
	Other	37	.3	1.4	100.0	644
	Total	2,728	23.7	100.0		
Missing	System	8,788	76.3			
Total		11,516	100.0			

Return to In what field of study is your highest health-related degree?

Projected total does not equal the sum across those holding a health-related baccalaureate/graduate degree due to cases with missing data. Projected population = (Frequency/2,728) x 47,449, where 47,449 = projected number of active therapists holding a health-related baccalaureate/graduate degree in total population.

Table 76. Presently pursuing higher academic degree

*

Return to <u>Are you</u> presently pursuing an academic degree that is higher than one you have already earned?

		Frequency	Parcent	Valid Percent	Cumulative	Projected
	F	пециенсу	Feiceni	reiteill	Feiceill	Fupulation
	Yes	1,950	16.9	22.1	22.1	32,419
Valid	No	6,888	59.8	77.9	100.0	114,515
	Total	8,838	76.7	100.0		
Missing	System	2,678	23.3			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across those seeking a higher education degree due to missing cases.

Return to If you are pursuing a higher academic degree	, which of the following best describes your
goal?	

		Frequency	Percent	Valid Percent	Cumulative Percent	Population Projection*
	Advance my RT career	1,190	10.3	61.9	61.9	20,083
Valid	Change my career	731	6.3	38.1	100.0	12,336
	Total	1,921	16.7	100.0		
Missing	System	9,595	83.3			
Total		11,516	100.0			

* Projected population = (Frequency/1,921) x 32,419, where 32,419 = projected number of active therapists pursuing a higher academic degree in total population.

Table 78. Employer offers tuition reimbursement

Return to Does your employer offer a program that discounts, reimburses, or forgives tuition?

				Valid	Cumulative	Population
		Frequency	Percent	Percent	Percent	Projection*
Valid	Yes	5,240	45.5	59.7	59.7	87,117
	No	2,129	18.5	24.3	84.0	35,395
	I don't know	1,407	12.2	16.0	100.0	23,392
	Total	8,776	76.2	100.0		
Missing	System	2,740	23.8			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across employers who offer tuition assistance due to missing cases.

Table 79. Patients receiving mechanical ventilation assigned to therapists

Return to Figure 52.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
	1	169	1.5	2.7	2.7
	2	201	1.7	3.3	6.0
	3	307	2.7	5.0	11.0
	4	829	7.2	13.5	24.5
) (- 1: -1	5	1,132	9.8	18.4	42.9
Valid	6	1,171	10.2	19.1	62.0
	7	478	4.2	7.8	69.8
	8	790	6.9	12.9	82.6
	9	103	.9	1.7	84.3
	10	526	4.6	8.6	92.8

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		Frequency	Percent	Valid Percent	Cumulative Percent
	11	15	.1	.2	93.1
	12	182	1.6	3.0	96.0
	13	18	.2	.3	96.3
	14	35	.3	.6	96.9
	15	83	.7	1.4	98.3
	16	26	.2	.4	98.7
	17	1	.0	.0	98.7
	18	6	.1	.1	98.8
	19	1	.0	.0	98.8
	20	31	.3	.5	99.3
	21	1	.0	.0	99.3
	22	3	.0	.0	99.4
	24	2	.0	.0	99.4
	25	36	.3	.6	100.0
	Total	6,146	53.4	100.0	
Missing	System	5,370	46.6		
Total		11,516	100.0		

Table 80. Expectation to deliver therapy to multiple patients in different locations simultaneously

Return to <u>When providing</u> direct patient care, has your employer expected you to deliver therapy to multiple patients in different rooms or locations simultaneously within the last year?

		Frequency	Percent	Valid Percent	Cumulative Percent	Population Projection*
Valid	Yes	3,208	27.9	44.8	44.8	53,334
	No	3,947	34.3	55.2	100.0	65,620
	Total	7,155	62.1	100.0		
Missing	System	4,361	37.9			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the due to missing cases.

Table 81. Frequencies for percentage of recent shifts respondents have been unable to complete all assigned work

		Frequency	Percent	Valid Percent	Cumulative Percent
	0%	3,309	28.7	48.6	48.6
	10%	1,601	13.9	23.5	72.1
	20%	581	5.0	8.5	80.6
	30%	288	2.5	4.2	84.8
	40%	107	.9	1.6	86.4
.,	50%	115	1.0	1.7	88.1
Valid	60%	48	.4	.7	88.8
	70%	56	.5	.8	89.6
	80%	137	1.2	2.0	91.6
	90%	190	1.6	2.8	94.4
	100%	380	3.3	5.6	100.0
	Total	6,812	59.2	100.0	
Missing	System	4,704	40.8		
Total		11,516	100.0		

Return to Figure 63.

Table 82. Availability of work prioritization system

Return to <u>Does your</u> employer provide a system that helps you to prioritize your work assignments when providing direct patient care and there is not enough time to complete them all?

		Frequency	Percent	Valid Percent	Cumulative Percent	Projected Population*
		riequency	i orcent	rereent	rercent	- openation
Valid	Yes	3,661	31.8	43.7	43.7	60,865
	No	3,717	32.3	44.4	88.1	61,796
	I don't provide direct patient care	1,000	8.7	11.9	100.0	16,625
	Total	8,378	72.8	100.0		
Missing	System	3,138	27.2			
Total		11,516	100.0			

* Projected total does not equal the sum across availability of work prioritization system due to missing cases. Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population.

Table 83. Use of prioritization system

Return to When providing direct patient care, how often do you use the prioritization system?

		Frequency	Percent	Valid Percent	Cumulative Percent	Projection Population*
Valid	Every day	2,413	21.0	67.7	67.7	40, 117
	Once a week	309	2.7	8.7	76.4	5,
	Once a month	197	1.7	5.5	81.9	
	Less than once a month	645	5.6	18.1	100.0	
	Total	3,564	30.9	100.0		
Missing	System	7,952	69.1			
Total		11,516	100.0			

* Projected total does not equal the sum across use of work prioritization system due to missing cases. Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population.

Table 84. Use of protocols to deliver respiratory care

Return to Do you deliver respiratory care by protocol when providing direct patient care?

		Frequency	Percent	Valid Percent	Cumulative Percent	Projected Population*
Valid	Yes	5,687	49.4	68.4	68.4	94,548
	No	1,692	14.7	20.3	88.7	28,130
	l don't provide direct patient care	941	8.2	11.3	100.0	15,644
	Total	8,320	72.2	100.0		
Missing	System	3,196	27.8			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across use of protocols due to missing cases.

Table 85. Percentage of respiratory care delivered by protocol

		_		Valid	Cumulative	Population
	r	Frequency	Percent	Percent	Percent	Projection*
	5%	114	1.0	2.1	2.1	1,896
	10%	176	1.5	3.2	5.2	2,926
	15%	120	1.0	2.2	7.4	1,995
	20%	244	2.1	4.4	11.8	4,057
	25%	214	1.9	3.9	15.7	3,558
	30%	210	1.8	3.8	19.5	3,491
	35%	72	.6	1.3	20.8	1,197
	40%	217	1.9	3.9	24.7	3,608
	45%	34	.3	.6	25.3	565
	50%	632	5.5	11.4	36.7	10,507
Valid	55%	23	.2	.4	37.1	382
	60%	197	1.7	3.6	40.7	3,275
	65%	42	.4	.8	41.4	698
	70%	215	1.9	3.9	45.3	3,574
	75%	409	3.6	7.4	52.7	6,800
	80%	445	3.9	8.0	60.8	7,398
	85%	144	1.3	2.6	63.4	2,394
	90%	521	4.5	9.4	72.8	8,662
	95%	333	2.9	6.0	78.8	5,536
	100%	1,175	10.2	21.2	100.0	19,535
	Total	5,537	48.1	100.0		
Missing	System	5,979	51.9			
Total		11,516	100.0			

Return to A	pproximately	what I	percentac	e of the	care vou	provide	is delivered	l by i	orotocol?
	pproximatory	winder				pi o tido i			51010001.

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across percentage of care by protocol due to missing cases.

Table 86. Shift worked

Return to Figure 68.

				Valid	Cumulative	Population
		Frequency	Percent	Percent	Percent	Projection*
	8-hour	1,831	15.9	22.3	22.3	30,441
	10-hour	394	3.4	4.8	27.1	6,550
) / - l' -l	12-hour	5,234	45.4	63.9	91.0	87,017
valid	Rotating	407	3.5	5.0	96.0	6,766
	Other	330	2.9	4.0	100.0	5,486
	Total	8,196	71.2	100.0		
Missing	System	3,320	28.8			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across availability of shift worked due to missing cases.

Table 87. Nicotine use

Return to <u>Which of</u> the following best describes your nicotine use (cigarettes, cigars, pipe or spit tobacco)?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Never tried nicotine	3,870	33.6	46.7	46.7
	Experimented with nicotine a few times	2,048	17.8	24.7	71.4
	Used nicotine, but have quit	1,802	15.6	21.8	93.2
Valid	Use nicotine less than once a day	105	.9	1.3	94.5
	Use nicotine once or more a day	459	4.0	5.5	100.0
	Total	8,284	71.9	100.0	
Missing	System	3,232	28.1		
Total		11,516	100.0		

Return to In what year did you quit using tobacco?

				Valid	Cumulative
	- r	Frequency	Percent	Percent	Percent
	1969	1	.0	.1	.1
	1970	1	.0	.1	.1
	1971	2	.0	.1	.2
	1972	4	.0	.2	.5
	1974	4	.0	.2	.7
	1975	6	.1	.3	1.0
	1976	4	.0	.2	1.2
	1977	5	.0	.3	1.5
	1978	6	.1	.3	1.9
	1979	4	.0	.2	2.1
	1980	19	.2	1.1	3.2
	1981	10	.1	.6	3.7
	1982	15	.1	.8	4.6
	1983	8	.1	.5	5.0
	1984	20	.2	1.1	6.2
	1985	30	.3	1.7	7.8
Valid	1986	23	.2	1.3	9.1
valid	1987	20	.2	1.1	10.3
	1988	30	.3	1.7	12.0
	1989	17	.1	1.0	12.9
	1990	53	.5	3.0	15.9
	1991	12	.1	.7	16.6
	1992	20	.2	1.1	17.7
	1993	29	.3	1.6	19.4
	1994	16	.1	.9	20.3
	1995	29	.3	1.6	21.9
	1996	23	.2	1.3	23.2
	1997	17	.1	1.0	24.2
	1998	41	.4	2.3	26.5
	1999	51	.4	2.9	29.4
	2000	104	.9	5.9	35.2
	2001	37	.3	2.1	37.3
	2002	26	.2	1.5	38.8
	2003	34	.3	1.9	40.7

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		F	Damaant	Valid	Cumulative
	Г	Frequency	Percent	Percent	Percent
	2004	36	.3	2.0	42.7
	2005	84	.7	4.7	47.5
	2006	39	.3	2.2	49.7
	2007	43	.4	2.4	52.1
	2008	52	.5	2.9	55.1
	2009	55	.5	3.1	58.2
	2010	114	1.0	6.4	64.6
	2011	43	.4	2.4	67.0
	2012	81	.7	4.6	71.6
	2013	48	.4	2.7	74.3
	2014	62	.5	3.5	77.8
	2015	85	.7	4.8	82.6
	2016	54	.5	3.0	85.7
	2017	78	.7	4.4	90.1
	2018	90	.8	5.1	95.1
	2019	54	.5	3.0	98.2
	2020	32	.3	1.8	100.0
	Total	1,771	15.4	100.0	
Missing	System	9,745	84.6		
Total		11,516	100.0		

Table 89. Furloughed during pandemic

Return to Figure 75.

		Frequency	Percent	Valid Percent	Cumulative Percent	Projected Population*
	Yes	735	6.4	8.9	8.9	12,220
Valid	No	7530	65.4	91.1	100.0	125,189
	Total	8,265	71.8	100.0		
Missing	System	3,251	28.2			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across furloughed during the pandemic due to missing cases.

Table 90. Currently furloughed

Return to Are you currently furloughed?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	131	1.1	18.1	18.1
Valid	No	591	5.1	81.9	100.0
	Total	722	6.3	100.0	
Missing	System	10,794	93.7		
Total		11,516	100.0		

Table 91. Length of furlough

Return to How many months was the furlough period?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Less than 1 month	216	1.9	32.0	32.0
	1 month	71	.6	10.5	42.5
	2 months	135	1.2	20.0	62.5
	3 months	98	.9	14.5	77.0
	4 months	43	.4	6.4	83.4
	5 months	42	.4	6.2	89.6
Valid	6 months	31	.3	4.6	94.2
	7 months	9	.1	1.3	95.6
	8 months	6	.1	.9	96.4
	9 months	2	.0	.3	96.7
	10 months	7	.1	1.0	97.8
	Indefinitely	15	.1	2.2	100.0
	Total	675	5.9	100.0	
Missing	System	10,841	94.1		
Total		11,516	100.0		

Table 92. Travel to COVID pandemic hotspot

Return to Did you travel to a COVID pandemic hotspot to provide respiratory care?

		Frequency	Percent	Valid Percent	Cumulative Percent	Projected Population*
	Yes	580	5.0	7.0	7.0	9,643
Valid	No	7,682	66.7	93.0	100.0	127,716
	Total	8,262	71.7	100.0		
Missing	System	3,254	28.3			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across COVID hotspot travels due to missing cases.

Table 93. Time spent at a COVID hotspot

Return to For how many weeks did you work at the hotspot last?

		_		Valid	Cumulative
		Frequency	Percent	Percent	Percent
	.00	3	.0	.5	.5
	.20	1	.0	.2	.7
	.25	1	.0	.2	.9
	.50	1	.0	.2	1.1
	1.00	28	.2	5.1	6.2
	1.50	2	.0	.4	6.6
	2.00	38	.3	6.9	13.5
	2.50	2	.0	.4	13.9
	3.00	18	.2	3.3	17.2
	3.50	2	.0	.4	17.5
	4.00	49	.4	8.9	26.5
Valid	5.00	14	.1	2.6	29.0
	6.00	37	.3	6.8	35.8
	7.00	7	.1	1.3	37.0
	8.00	62	.5	11.3	48.4
	9.00	5	.0	.9	49.3
	10.00	28	.2	5.1	54.4
	11.00	3	.0	.5	54.9
	12.00	42	.4	7.7	62.6
	13.00	46	.4	8.4	71.0
	14.00	7	.1	1.3	72.3
	15.00	6	.1	1.1	73.4
	16.00	31	.3	5.7	79.0

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				Valid	Cumulative
	-	Frequency	Percent	Percent	Percent
	17.00	3	.0	.5	79.6
	18.00	7	.1	1.3	80.8
	19.00	1	.0	.2	81.0
	20.00	24	.2	4.4	85.4
	21.00	3	.0	.5	85.9
	22.00	3	.0	.5	86.5
	23.00	1	.0	.2	86.7
	24.00	14	.1	2.6	89.2
	25.00	8	.1	1.5	90.7
	26.00	13	.1	2.4	93.1
	28.00	5	.0	.9	94.0
	29.00	1	.0	.2	94.2
	30.00	3	.0	.5	94.7
	31.00	1	.0	.2	94.9
	32.00	5	.0	.9	95.8
	35.00	1	.0	.2	96.0
	36.00	2	.0	.4	96.4
	37.50	1	.0	.2	96.5
	39.00	1	.0	.2	96.7
	40.00	5	.0	.9	97.6
	45.00	2	.0	.4	98.0
	50.00	3	.0	.5	98.5
	52.00	8	.1	1.5	100.0
	Total	548	4.8	100.0	
Missing	System	10,968	95.2		
Total		11,516	100.0		

Table 94. COVID hotspot travel locations

Return to Figure 80.

		Frequency	Percent	Valid Percent	Cumulative Percent
	Outside the US	7	.1	1.2	1.2
	Alabama	4	.0	.7	1.9
Valid	Alaska	1	.0	.2	2.1
	Arizona	18	.2	3.2	5.3
	Arkansas	1	.0	.2	5.5

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	_		Valid	Cumulative
	Frequency	Percent	Percent	Percent
California	49	.4	8.7	14.1
Colorado	8	.1	1.4	15.5
Connecticut	8	.1	1.4	17.0
Delaware	1	.0	.2	17.1
District of Columbia	4	.0	.7	17.8
Florida	27	.2	4.8	22.6
Georgia	18	.2	3.2	25.8
Idaho	4	.0	.7	26.5
Illinois	29	.3	5.1	31.6
Indiana	7	.1	1.2	32.9
Iowa	4	.0	.7	33.6
Kansas	2	.0	.4	33.9
Kentucky	8	.1	1.4	35.3
Louisiana	24	.2	4.2	39.6
Maryland	22	.2	3.9	43.5
Massachusetts	24	.2	4.2	47.7
Michigan	21	.2	3.7	51.4
Minnesota	8	.1	1.4	52.8
Mississippi	3	.0	.5	53.4
Missouri	5	.0	.9	54.2
Nebraska	1	.0	.2	54.4
Nevada	1	.0	.2	54.6
New Hampshire	1	.0	.2	54.8
New Jersey	26	.2	4.6	59.4
New Mexico	5	.0	.9	60.2
New York	66	.6	11.7	71.9
North Carolina	7	.1	1.2	73.1
North Dakota	4	.0	.7	73.9
Ohio	14	.1	2.5	76.3
Oklahoma	3	.0	.5	76.9
Oregon	4	.0	.7	77.6
Pennsylvania	18	.2	3.2	80.7
Rhode Island	2	.0	.4	81.1
South Carolina	9	.1	1.6	82.7
South Dakota	1	.0	.2	82.9

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		Frequency	Percent	Valid Percent	Cumulative Percent
	Tennessee	2	.0	.4	83.2
	Texas	61	.5	10.8	94.0
	Utah	2	.0	.4	94.3
	Virginia	6	.1	1.1	95.4
	Washington	19	.2	3.4	98.8
	West Virginia	3	.0	.5	99.3
	Wisconsin	3	.0	.5	99.8
	Wyoming	1	.0	.2	100.0
	Total	566	4.9	100.0	
Missing	System	10,950	95.1		
Total		11,516	100.0		

Table 95. Gender

Return to With which of the following do you identify?

		Frequency	Percent	Valid Percent	Cumulative Percent	Population Projection*
Valid	Female	5,693	49.4	69.9	69.9	94,648
	Male	2,294	19.9	28.2	98.1	38,138
	Non-binary	14	.1	.2	98.3	233
	Prefer not to say	138	1.2	1.7	100.0	2,294
	Total	8,139	70.7	100.0		
Missing	System	3,377	29.3			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across gender due to missing cases.

Table 96. Identify as transgender

Return to Do you identify as transgender?

				Valid	Cumulative	Population
		Frequency	Percent	Percent	Percent	Projection*
Valid	Yes	20	.2	.2	.2	333
	No	7970	69.2	98.4	98.6	132,504
	Prefer not to say	111	1.0	1.4	100.0	1,845
	Total	8,101	70.3	100.0		
Missing	System	3,415	29.7			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across transgender identity due to missing cases.

Table 97. Hispanic origin

Return to Are you of Hispanic, Latino, or Spanish origin?

		Frequency	Percent	Valid Percent	Cumulative Percent	Population Projection*
Valid	No	7,414	64.4	91.5	91.5	123,260
	Yes - Mexican, Mexican American, or Chicano	418	3.6	5.2	96.6	6,949
	Yes - Puerto Rican	83	.7	1.0	97.6	1,380
	Yes - Cuban	34	.3	.4	98.1	565
	Yes - Another Hispanic, Latino, or Spanish origin	157	1.4	1.9	100.0	2,610
	Total	8,106	70.4	100.0		
Missing	System	3,410	29.6			
Total		11,516	100.0			

* Projected population = (Frequency/11,516) x 191,457 where 191,457 = number of active therapists in total population. Projected total does not equal the sum across Hispanic origin due to missing cases.

Appendix D. Compiled Comments from Survey Respondents

"What is the title for your primary job?" Other Responses:

- Advanced practice rt
- Advanced practitioner
- All
- Also pulmonary function tech. I split my time 50/50
- And pharmacist
- Asthma Educator, Pulmonary Function Technologist, Certified Tobacco Treatment Specialist
- Cardiovascular Tech
- Cardiovascular Technician Cath lab
- Cardiovascular technologist
- Care Coordinator
- Care Service Coordinator
- Caregiver (3 responses)
- Certified surgical technologist
- **Clinical Operations Coordinator**
- Clinical Specialist / Research Coordinator / PFT
- Clinical Specialist, Department Educator, Disease • Manager or Patient Educator
- Coding and compliance .
- **Contract Trainer** .
- CSR
- Diagnostics
- Diagnostics, PFT EEG Stress, EKG
- **Director/Higher Education**
- Dual role of sales and home care pt educator
- Echo and Cardiac stress test
- Educator (2 responses) .
- Educator/sim lab specialist .
- **Elevating Respiratory Care** •
- EMT
- . Epidemiologist
- Executive Assistant
- Fellow, business leader .
- Field Surveyor •
- Financial aid receptionist manager at Nemcc .
- First responder
- Founder
- Government
- Health Services Specialist II
- Health technician •
- Health Technician-working on state licensure •
- Healthcare simulation technician •
- Healthcare Specialist (2 responses) •
- Hemodynamic Technician
- Hospice care consultant •
- I am working as intake coordinator .
- I cook food at a Mental Health Crisis Facility because no one wants to hire someone with a CRT credential. I worked in Sleep Disorders for Five years and was not assisted in getting my state license because the Director of Cardiopulmonary over the Sleep Lab said it wasn't a Cardiopulmonary Field.
- I do Sleep, Cardiac Rehab and More
- I have a medical fitness business

- - I have been self employed for the last 25 years
 - I retired in Feb. 2020 after 40 yrs of service
 - **I-SNP** Provider Relations
 - I'm now a nurse
 - In
 - Instructional Support Specialist & Coordinating Manager
 - Lab coordinator and program recruiter
 - left the field in 2019
 - LTACH liaison
 - Marketing (non respiratory)
 - Marketing manager
 - Master Health Coach focused on Chronic Illness
 - medical supplies tech now
 - Mother
 - moved to billing manager •
 - **Multiple Title Ranges** •
 - Not considered mgmr •
 - Not employed yet •
 - Not in Respiratory at the present •
 - Not working as an RT or CRT
 - Not working as RT
 - Not working currently
 - Nurse
 - Nursing assistant
 - Office Manager
 - Outpatient services
 - Paramedic
 - patient access
 - Patient Advocacy Coordinator •
 - Patient Care Coordinator .
 - Patient experience
 - PFT and NICU
 - PFT, Bronchoscopy and adult CF clinic
 - Pft, cardiac stress/hotler tech, resp therapist
 - PFT, Pulmonary Rehab & Staff therapist
 - PFT/RT
 - Pharmacy Tech
 - Pharmacy Technician
 - Phlebotomist (2 responses)
 - Physician
 - Physician/Patient Liaison
 - PICU RCP CLIN III
 - Prison therapist for medical and classification . center and other prisons in state
 - Private in home caregiver
 - Prn ECMO specialist and staff therapist •

Respiratory Assessment coordinator

Respiratory practitioner teamlead

Respiratory Therapy Navigator

- recent grad / admin
- Regional trainer
- **Registered Nurse**
- Rehab liaison

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Resp discharge laison

- Retired/per diem
- RN Case Manager
- RT Home medical equipment
- Safety Specialist
- School Medical Professional
- Secondary Teacher in A health science program
- Self employed
- shared duties pulmonary function and staff therapist
- Slave
- Sleep Coordinatoor/ respiratory case manager
- Sleep Lab Coordinator
- Sleep Navagator
- Sleep tech and staff therapist
- Special Diagnostics Therapist- PFT, Bronchoscopy Assistant, and Research Staff
- Staff RRT and RPFT
- staff therapist and director
- Staff therapist and ECMO specialist
- Staff Therapist and Pulmonary Function Technologist

"Other Credentials Earned" Other Responses

- AACVPR
- AARC COPD
- AARC COPD Educator
- AARC Pulmonary Disease Educator
- Advanced Burn Life Support
- Advanced Emergency Medical Technician
- Advanced Wilderness Life Support
- ALA COPD Moderator
- Anesthesia Technician, Emergency Mgmt
 Specialist
- Asthma Educator through the ALA and CITI Research Cert.
- ATC athletic trainer
- Breath Alcohol Technician
- C-ELBW (3 responses)
- Cardiac and pulmonary rehab
- Cardiopulmonary exercise test
- Case manager certificates
- CCHS, RST
- CCRN (3 responses)
- CCRN, CMC, TCRN
- CCRP (2 responses)
- CCS, CCS-P, CCDS, CCDS-O, CDIP, CRC
- CCSH (2 responses)
- CDME
- Certification in clinical sleep health
- Certification in Pulmonary rehabilitation AARC/ AACVPR
- Certified adult ecmo specialist CE-A
- Certified American College Healthcare Executives
- Certified Anesthesia Technologist
- Certified Biomedical Equipment Technician
- certified cardiovascular invasive specialist
- Certified cardiovascular technician
- Certified Clinical Medical Assistant
- Certified Clinical Research Coordinator (CCRC)
- Certified Clinical Research Coordinator from the ACRP
- Certified Clinical Sleep Health (CCSH)

- Standardized Patient
- student therapist
- Superintendent
- Surveyor
- TCS
- Teacher (3 responses)
- Technologist assistant
- Temperature Screener
- Transitional Coordinator Home Visit Program
- Transport ems
- Unemployed (4 responses)
- Unemployed Student
- unemployed-due to caused disability from job
- Value Analyst for clinical supply optimization
- virtual assistant
- Weekend Team Leader
- Working In the private school.
- Certified COPD Educator (3 responses)
- Certified ECG Technician
- Certified ECMO Specialist-Adult (CES-A) (2 responses)
- Certified Exercise Physiologist (ACSM-EP)
- Certified Fitness Trainer
- Certified Health Coach
- Certified Healthcare Simulation Educator (CHSE) (4 responses)
- Certified Hyperbaric Technologist Certified Wound Care Associate
- Certified in Occucare DOT and Non DOT
- Certified medical assistant
- Certified Medical Transport Executive
- Certified nurse assistant
- Certified nurses aide
- Certified Nursing Assistant (3 responses)
- Certified Patient Safety Specialist
- Certified Pharmacy Technician CPhT (4 responses)
- Certified Phlebotomist
- Certified Professional Coder, Certified compliance Officer
- Certified Professional in Healthcare Quality CPHQ
- Certified Project Manager
- CERTIFIED RHYTHM ANALYSIS TECH (CRAT) CRITICAL CARE EMERGENCY MEDICAL TRANSPORT PROVIDER (CCEMTP)
- Certified Rhythm Analysis Technician (CRAT)
- Certified sleep educator
- Certified Sleep Specialist

Clinical Coach

CMA (AAMA)

- Certified surgical technologist
- Certified Tobacco Educator (CTE)
- CES-A

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- CES-A (Certified ECMO Specialist-Adult)
- CHC (Certified in Healthcare Compliance)CHSOS (2 responses)

- CNA (11 responses)
- CNIM certified intraoperative neuromonitoring
- Contact Tracer
- Contact tracing
- COPD
- COPD Disease management
- COPD Educator (19 responses)
- COPD educator and pulmonary rehab
- Copd educator certification
- Copd educator, pulm rehab educator
- COPD Educator, Pulmonary Disease Educator
- COPD Educator, Pulmonary Disease Educator, Pulmonary Rehabilitation
- COPD educator, Pulmonary rehab educator
- COPD Specialist
- CPC-A
- CPFT (2 responses)
- CPHQ
- CPHRM. CPHQ
- CPPS (2 responses)
- CPR Instructor (2 responses)
- cpt-1
- CPTC
- CRAT Certified Rhythm Analysis Technician
- D-ABFT FT
- DABSM
- dive medic
- EBUS AND NAVI bronoscopy trained and certified
- ECMO (2 responses)
- ECMO Specialist (15 responses)
- ECMO Tech
- EEG emg/ncv tech not registered
- ekg
- emergency medical responder
- Emr
- EMT-P and Community Paramedic
- Epic Credentialed ClinDoc and OBGYN 200 Trainer
- EPIC CT
- FAARC
- FACHE (2 responses)
- FACHE, FACHCA
- Family Nurse Practitioner
- FCCS (4 responses)
- Firefighter
- Firefighter II
- FP-C
- Gerontology and Geriatric
- HACP
- Healthcare Quality CPHQ
- Healthcare Risk Manager
- HEM Healthcare Environmental Manager Certified
- Home Care specialist
- Hyperbaric Medicine Technologist
- IHI quality certification
- Infection Control Preventionist
- Intubation
- L.Ac
- Laboratory assistant
- Lean Six Sigma Certified Black Belt
- LHRM licensed health care risk manager
- Massage and Bodyworks Therapist
- Massage Therapist

- Medical assistant
- MHA
- National sKI pATROL
- NIOSH Certified Pulmonary Function, COAHC
- NIOSH Spirometry Certified
- NREMT-P
- Occupational therapist (OTR)
- OEC
- PbT
- PEP
- PFCCS (2 responses)
- PFCCS; STABLE, CARDIAC STABLE
- Pharmacy Technician (4 responses)
- Phlebotomist Technician
- PHRN
- PICC team
- PNCCT
- Provisionally Licensed Professional Counselor, PLPC
- PSGT
- PTCB CPhT, NHA -CET/EKG CPT/Phlebotomists CPCT/Patient Care Tech
- Pulmonary Disease Educator (10 responses)
- Pulmonary Disease Navigator (2 responses)
- Pulmonary Disease Specialist
- Pulmonary Rehab (4 responses)
- Pulmonary Rehab Certificate (3 responses)
- Pulmonary Rehab Certified
- pulmonary rehab educator
- Pulmonary Rehab specialist (2 responses)
- Pulmonary rehab specialist certification
- Pulmonary rehabilitation (2 responses)
- Pulmonary Rehabilitation Certification (7 responses)
- RCS (2 responses)
- RDA

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RMA

SLPA

STNA

- RDCS (2responses
- RDMS and RVT
- RDMS and RVT
- Register Sleep Technologist & Register
 polysomnographic Technologist

Registered Sleep Technologist

- Registered Cardiovascular Technologist
 Noninvasive Specialist
- Registered pharmacist

Research Cordinator

RST (2 responses)

RST, CCSH

RST Register Sleep Tech

S.T.A.B.L.E (11 responses)

ServSafe Food Handler

STABL, cardiac STABL

TPATC (3 responses)

STABLE, TPATC

US Army Medic

responses)

Serve Safe Proctor and Management

Surgical technologist (2 responses)

Vascular Access-Board Certified (VA-BC) (7

Wound Treatment Associate

"Other Science Field" Other Responses

- and leadership
- Applied science
- Applied Sciences and Technology
- Assistive augmentative tech
- Bachelor of Applied Technology
- bachelor of science[bsc]
- Child Development
- Engineering
- Forensics
- Have 2 Masters Degrees
- Health Care Services (2 responses)
- Health occupations education -vocational education
- Health Professions (2 responses)
- Health Services
- Health studies
- Health Systems
- Healthcare Compliance/Law
- Healthcare Education
- Industrial hygiene

- Master's of Science in Healthcare Innovation Masters of Healthcare Innovation
- MSc Clinical Research
- Naturopathy
- Oriental Medicine
- oriental medicine / acupuncture
- Professional Development and Advanced Patient Care
- Regulatory Affairs for Drugs, Devices, and Biologics
- Respiratory Care Leadership
- Science (2 responses)
- science in integrated Healthcare studies
- Science in rehabilitation science
- Sciences
- Training and Development in Health Care
- With Respiratory Therapy emphasis
- "What kind of shift do you typically work?" Other responses
- 1 week of 8h shifts in Bronch Lab, 1 week 10 hr shifts in PFT Lab-Rotating
- 10 hr. & 12 hr.
- 10 or 12 hrs; depends on the need
- 10-25 hours per week
- 10-hour/12-hour
- 11 hours
- 12 and 16 hr shifts
- 12 but mandatory call and fairshare
- 12 but we get cut and sent home early
- 12 hour and 4 hour
- 12 hour staffing shift and 8-10 hour office shifts
- 12 hour weekend option
- 12 hours plus call
- 12-hour
- 12.5 (2 responses)
- 12/24 hour
- 12hr and 24hr/ wk
- 13 (4 responses)
- 13.5 (2 responses)
- 14 24s every other two weeks
- 14 days on call and 14 days off
- 14 hour (3 responses)
- 15 hr
- 16 hour shift once a week
- 16- hour (9 responses)
- 16-24-40
- 17-hour
- 2 to 3 hours a day, 3 days a week
- 2 to 6 as needed
- 2-3 hr days
- 2-4 hrs
- 24 hour shifts (life flight)
- 24 hours (12 responses)
- 24 to 36 hrs per week

• 3 hour (2 responses)

- 4 10s
- 4 hours (5 responses)
- 4 to 12 hour shift, I'm pool
- 4- 5 hrs. in the PFT lab
- 4-10 hours based upon doctor procedures
- 4-hour, 8-hour, 12-hour
- 40 hour salary for director
- 40 hours per week (4 responses)
- 40 hours salary
- 40 hr week then 24/7 on call
- 48 hour EMS shifts
- 5 days a week/8 hours
- 5 hr
- 5-7.5
- 5-8 hours per day
- 5-hour
- 5.5 hour
- 6 hours (6 responses)
- 6-12 weekly
- 6-9 hours day
- 6.5
- 6am until
- 7 hour

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- 7.5 (2 responses)
- 8 18 hrs
- 8 hour + OT
- 8 hour at school, 12 in the hospital

8 to 10 hours, salaried position

• 8 hour day at a college

8 hr office, 12 hr clinical

• 8 hour plus 8 hour re see tricted on call

8-10 HR/day depending on staff/hospital needs

- 8-12 hours 12 hour shift once a week at the bedside. The rest are office hours that vary between 8-12.
- 8-12, depending on the day and department needs
- 8-12; Always on call for Team Members
- 8-15 hrs/day
- 8-5, M-F
- 8-hour plus on-call avg 77.5-hour/week
- 8, call
- 8,12,16 hour shifts
- 9 9 hr shifts every two weeks
- 9 hour/4 days
- 9 hours (26 responses)
- 9- hour M-Th, 4-hour F
- 9.5 (2 responses)
- Academic calendar
- adjunct faculty 2-3 hours a day
- Adjunct teaching
- alternating combination of 8,10,12 and 14 hour shifts
- Always working and on call
- Approximately 9 hours/day
- as needed I am the only pft at my hospital
- As needed. Some days are short, some days are long.
- as owner- I must always be available
- between 8-12 hours depending on what needs to be done
- Contract/PRN
- Covering a territory, driving time, presentation time vary
- currently covering 4 hr gaps
- Day shift
- day shift 8 to 12 hours
- Days until our work load is complete
- Daytime
- Depend on the semester I am teaching in
- Depends on what is needed. Could be 4,5 8 or 12 hours
- Director position
- Director so 8-10 hours/day M-F
- do not do shift work
- each morning till I'm done M-F
- Education
- Education academicf
- Educational
- Educator 8 hour shift but regularly work over this
- Educator so hours fluctuate
- educator-working 5-6 days a week, hours per day vary
- Evening
- evenings according to departmental needs
- exempt
- Exempt 8-10 hours per day
- flex time any hours are acceptable as long as I
 meet my 40 hrs
- Flex, Im a salaried employee
- Floating schedule to meet needs of US time zone customers
- Fluctuates with courses as educator and prep time...Many variables that change with course

assignments: new course development, on line synchronus for examples

- . Home care daily visits
- Homecare
- Hours vary

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- I am a Director but work 12 hour shifts when needed to fill in the schedule
- I am an instructor I work all the time
- I go where and when I am needed
- I haven't actually started in the hospital yet.
- I make my own schedule
- I teach online with no set hours.
- I teach so it varies
- I teach, so the hours vary a lot!
- I work 4 different places all per diem or contract
- I work 8 hour days in an office setting, not patient care
- I work on a pet client basis
- I work with assigned patients for equipment delivery and training
- I'm self employed, & work my schedule as I determine my week
- l'm in sales
- instruct students from one to three hours per session
- Leadership, always working, on call position
- left the field in 2019
- management (2 responses)
- Management=8 to 12 hours as needed
- Manager working 10 hr days or more
- Medical equipment set up
- medical leave then fired too to heal
- Monday-Friday physically present, available on-call 24/7
- More than 8 hr varied
- Mostly 8hr. But 12hrs if needed.
- Mostly consult on Multidisciplinary Rounds and Patients in MICU
- My main job is teaching but when I work direct careit is typically 12 hrs
- no shifts-just hours per day
- No specific time
- non shift work
- None (4 responses)
- not by shift but typically a 10 hr day
- not employed as respiratory therapist
- Not shift work (2 responses)
- Not shift work , 9-5
- Not working bow
- Office hours
- On call (2 responses)
- On call 4
- Online educator can work whenever
- Paid for 8 but work 10 12
- Part time 24 hours per week, variable daily M-F
- Part-time and rotating

Prn (4 responses)

• *PD*

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- PD so usually 8 but very flexible may be weekends 10 hours what is needed at the time
- PD- work around the clock all year long
 Per diem this last year

- PRN Telehealth in one hour increments
- Providing home care to my husband who is at the end stage of COPD
- Recent graduate, not working yet
- registry
- Regualr
- Resigned 2019
- Retired RT
- Salaried (18 responses)
- Salaried for 8, typically have to do 10
- salaried leadership
- Salaried-Long days
- salaried, shifts vary totalling approximately 55hrs
- Salary 44+hours
- salary 50-60 hrs weekly
- salary position 8-10 hr shift as needed
- Salary varies on week and day
- Self scheduled to include 4, 6, 8, 10, 11 hour shifts rotating days/ evenings/ nocs
- Self-employed. Hours depend upon the current project.
- Set my own schedule
- Should be 8 hr shift but often 10-12 hrs, overtime exempt
- teach both on campus and virtually always available
- Teach in the classroom and clinical setting
- Teacher
- Teaching and office hours
- teaching students, typically 6-7 hours
- three 11hrs and one 7 hr per week
- Three weeks/month
- Travel to on-site locations to provide training

- Typically about 6 hours per shift I leave after the last PFT of the day
- Unemployed (6 responses)
- usually 8 hours as a District Manager
- Variable hoirs depnding on teaching and administrative load, averages 8 -10 hours daily
- Varied based on need and training globally
- varied each day according to patient schedule
- Varies (8 responses)
- Varies as I travel. Generally M-F 8-5
- Varies based on project
- varies between 10 12 hours
- Varies by semester
- Varies depending on needs of the facility
- Varies depending on workload
- Varies some travel required and office based
- varies with course assignments
- Various 8-12
- Various PRN
- various shifts at my primary job, but mostly 8-9 hrs.
- Weekend
- Weekend/Holiday
- What is needed
- Whatever the business requires.
- Whatever the customer nrrde
- when on floor 12 hours, when in Pulmonary rehab 8
 hours
- When respiratory patients need education
- Work 10 hrs on call 13.5; repeat
- Work on a Contractual Basis Providing RC Education Services
- work part time 24 hours a week 6 hours a day for 4 days
- Work via appointments.

Other Race responses

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- Afghan (2 responses)
- African
- Afro-Puerto Rican/ white
- American (8 responses)
- Apache attack helicopter
- arab
- Argentinian (2 responses)
- Armenian
- Asian
- Asian (Nepali)
- Assyrian.
- Biafra
- Biracial
- BLACK PLUS
- Black, white, American Indian
- Brazilian (2 responses)
- British
- Cape Verdean
- Caucasian
- Cherokee Indian
- Congolese
- Crucian
- do not wish to answer
- Do not wish to provide
- Dutch and Hispanic

- Eastern European
- Ecuadorian (2 responses)
- Egyptian (2 responses)
- Ethiopian
- EuroAsian
- European
- Far east-Afghanistan
- German, Irish, Pennsylvania Dutch
- germanic/scandanavian
- Haà tien (Haitian)
- Hispanic (57 responses)
- Hispanic and european

Human (15 responses)

hungarian, norweigan, czech

Indo Caribbean American

- hispanic white
- Hispanic, Mexican
- Hispanic/ Latino
- Hispano
- Hispanti

Inca

Iranian

Iranian

irish

Iranian american

- Irish white American
- Irish-Native American
- Israelite
- Italian (5 responses)
- Italian American
- Jamaican
- Jamaican/ german irish
- Japanese (15 responses)
- Jewish
- kurdish
- Latin (2 responses)
- Latina (4 responses)
- Latino (16 responses)
- Latino , puertorriqueño
- Latino/ Spanish
- MEDDLE EAST (SAUDI)
- Mediterranean
- Mexican (11 responses)
- Mexican American (12 responses)
- Mexican and Caucasian (mixed)
- Mexican/ saladorian
- mexican/white
- Middle Eastern
- Middle Eastern American
- Mixed race (6 responses)
- N/A
- Native Amazonian
- Native Indian
- Native Indian, not sure what tribe
- Native Nicaraguan indian

- Non of your business. This shouldn't be asked in 2020
- Northern european
- Not white
- Perfer not to say (10 responses)
- Persian
- Peruvian
- Peruvian Irish Spanish
- Polish
- Portuguese (4 responses)
- Pr
- Puerto Rican (7 responses)
- Russian (2 responses)
- Salvadorean
- Saudi American
- Scot Irish Welsh and blackfoot indian
- Somali I don't identify myself by color.
- Spanish (6 responses)
- Taiwanese
- Taiwanese-American
- Thai (5 responses)
- Two or more races
- Unknown
- Welsh American
- West Indian (2 responses)
- What difference should this make??
- White by Census definition
- White hispanic
- White Hispanic
- white/indian
- Why does RACE MATTER