AARC Human Resources Survey of Acute Care Hospital Employers

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SUMMARIES

Limitations of Study Results

There were 2,849 acute care hospitals that employed at least one respiratory therapist at the time this study was done. A total of 163 responses were received, of which less than one hundred responded to the entire survey. This sample represented about 5% of the population, which means there is a large probability of nonresponse bias in these results. Caution is encouraged when intending to generalize from these results because of the high likelihood for nonresponse bias.

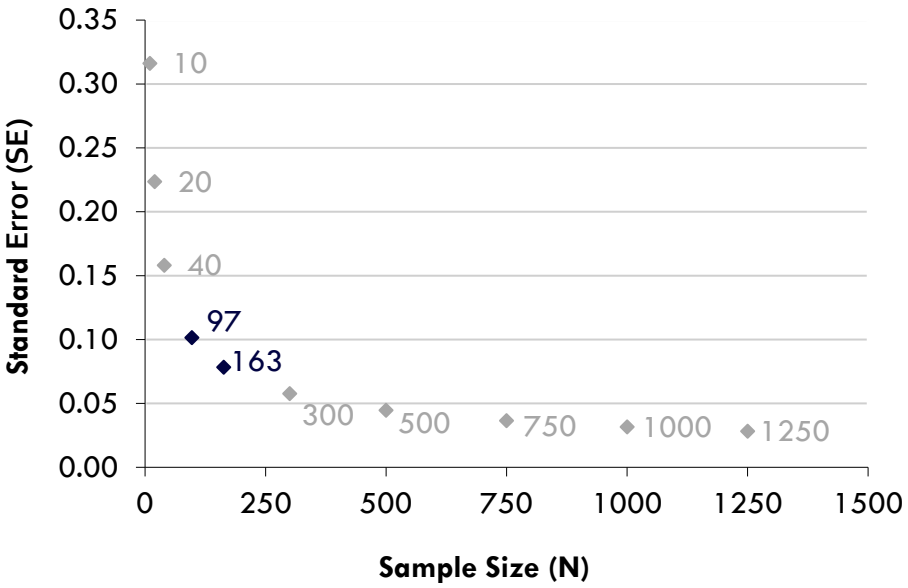


Figure 1. Relationship between N and SE

Figure 1 shows the amount of error associated with sample size. There is a larger level of error associated with the 97 completed responses and 163 total responses than would be seen with a larger sample size.

Geographic Characteristics

Using a population of 100,000 as the threshold between rural and urban communities, 72% of responses came from respiratory care directors in rural hospitals. The proportion was similar in 2020 when 71% of 291 responses came from rural areas.

Critical Access Hospitals

These hospitals are located in rural settings at least 35 miles from another hospital while having 24-hour emergency services and no more than 25 beds. Among the 2024 respondents, 33.1% gave an affirmative response. In 2020, the proportion of affirmative responses was 29.5%.

Cost Centers

The typical respondent to this study was a technical director of respiratory care who was responsible for three cost centers in the hospital. The top three cost centers were (1) respiratory care, (2) pulmonary function laboratory, and (3) sleep medicine, which were rank-ordered the same way in 2020 regarding the frequency of survey responses. Most of these departments had an administrative head who had a clinical background.

Hiring Practices and Goals

Increasing the proportion of baccalaureate-prepared therapists tended to be a low priority among respondents with a mode of 0% and a mean of 34% as an indication of the degree to which this was a department goal in 2024. This was nearly identical to the 2020 mode of 0% and a mean of 35%.

At most, 41% of the 2024 respondents indicated that their departments were exclusively staffed with therapists who had achieved the RRT credential. In 2020, 39% of the sample gave an affirmative response. However, if omitted responses were an indication of a negative response, then the percentage could have been as low as 22% in 2020. There were no omitted responses in 2024, but the 2024 item collecting responses had been moved forward among the items when compared to the 2020 survey. A majority of hospitals employ a mixture of respiratory therapists who have earned the CRT and the RRT.

Nearly 60% of 2024 respondents indicated that therapists who worked for them and who were eligible for the RRT credential were given a time limit to achieve the RRT. In 2020, comparative percentages were 60% and, if omitted responses were an indication of a negative response, 33% for the low estimate after accounting for missing responses. No responses were omitted in 2024 again perhaps because the item occurred earlier in the survey.

Most of the 2024 respondents (about 82%) indicated that therapists with CRT and RRT credentials were given the same work assignments in their hospitals. In 2020, 80% gave the same response.

Studies of Responses about FTEs

A median value of 18 and a mean of 34 described typical 2024 responses about the total FTEs in a hospital department. In 2020, mean and median values were respectively 16 and 31. The mean

and median values from Table 8 indicated that the typical respondent who was representing a hospital had between 1 and 2 vacant FTE for staff therapists.

Overtime Hours

Out of the total hours worked by therapists in these hospitals, the largest group of respondents reported paying between 5-9% of hours as overtime. The mean was 8% of hours as overtime in 2020.

Department Benchmarks and Productivity Measurements

Around 60% of respondents indicated they were required to benchmark productivity or quality measurements against departments of comparable hospitals, which was a little higher than the 2020 value, which was near 50%. Almost 80% of respondents indicated they measured the productivity of respiratory therapists in 2024 compared to nearly 75% in 2020. Procedure counts and charges remain the most common metrics among those that used such measurements in 2020 and 2024.

Orientation Duration

The first thing that was notable about the duration of orientation was the very wide range of 5 to 900 hours. The distribution was positively skewed with a greater frequency of responses toward the lower end of the range. Still, there were plenty of hospitals with prolonged orientation periods. The typical period among these hospitals was 200 hours to 216 hours depending on whether one trusted the median or mean value more to indicate what was typical. Similar responses were given in 2020 with a maximum of 1,200 hours, a mean of 160 hours and a median of 220 hours.

Protocol Uses

Of those who responded to the question, 47% had incorporated protocols into delivery of respiratory care; this proportion was 43% in 2020. Of those that used protocols, most used protocols related to oxygen and bronchodilator therapies.

Medical Direction

Among responses submitted in 2020, 52% indicated that a medical director had been designated for their departments. In 2024, respondents were asked instead to describe the individual or group providing medical direction or indicate that none was provided. A majority of respondents, 57%, indicated that a physician provided medical direction.

Expectations Regarding Additional Certifications (e.g., intubation, ACLS)

Among the 2024 respondents, 31% reported that respiratory therapists who had earned additional certifications were given additional clinical responsibilities. However, due to a high number of omitted responses, that percentage could have been as low as 18%. In 2020, 22% had

given an affirmative response. The percentage of respondents indicating that therapists who earned additional certifications were compensated more was 27% in 2024 and 11% in 2020. Again, due to omitted responses, the 2024 estimate could have been as low as 16%.

Turnover and Retention

When asked to compare turnover to the previous fiscal year, 48% of the 2024 respondents indicated that the rate was the same while 29% cited a decrease. In 2020, 54% had seen the same turnover while 39% had seen an increase. The time needed to recruit respiratory therapists had increased according to 54% of 2024 respondents who responded to the question while two thirds had cited increased time to recruit in 2020.

The most widely used retention incentive among these hospitals has been and continues to be reimbursement of tuition. Tuition reimbursement, sign-on bonuses, and specialty certification fee reimbursement were incentives offered by more than one-half of these hospitals. The availability of benefits was communicated in orientation materials and by regular email communications from the Human Resources department in a majority of facilities.

Work Prioritization

Approximately 63% of the 2024 respondents indicated their hospitals gave respiratory therapists tools to prioritize work assignments when there was not time to complete all tasks within a shift. In 2020, 73% of the sample gave affirmative responses about such tools.

Department Services

Although the 2024 respondents indicated that respiratory therapists sample arterial blood in practically all (96%) of these hospitals, only 64% of respondents reported that therapists analyzed the blood gas analysis results. In 2020, these percentages were respectively 91% and 67%. The mix of other services varied across facilities.

Average Hourly Wages

Analyses of wage differences were limited since technical directors were asked to extrapolate the average of wages paid to groups of respiratory therapists in different job positions. While these results revealed important factors that exerted effects on compensation within these acute care hospitals, more detailed analyses will be done in the study of responses from individual therapists. We encourage those who are interested in compensation factors to refer to the report summarizing responses from individual therapists.

INTRODUCTION

The American Association for Respiratory Care (AARC), as the professional membership organization for respiratory therapists, has periodically conducted human resource studies of therapists and institutions that employ therapists. Acute care hospitals are one such employer of a substantial proportion of respiratory therapists. The AARC prepared a survey with the intent that directors of respiratory therapy departments within these hospitals would respond.

Opportunities to respond to the survey were sent to the sample unsolicited by potential respondents. Members of the sample chose whether to respond. Therefore, the sample was composed of volunteers.

The Results section follows the order of questions as presented in the survey. Contents of the survey are presented in Appendix A.

METHODS

A survey of this population was completed in 2020, so the instrument from that study was the starting point for development of a survey for this study. AARC staff members Heather Willden, Director of Governance and Strategic Initiatives, and Mandy DeVries, MSc., RRT, RRT-NPS, Vice President of Education and Accreditation, revised and added questions to bring the instrument to its final form after consulting with stakeholders.

Survey sampling began with a listing of 2,849 acute care hospitals known to employ at least one respiratory therapist. Contents of an invitation postcard are shown in Appendix B. Each postcard was addressed to the attention of the "Director/Manager of Respiratory Care." Those who chose to participate were directed to the online survey. The survey was available to respondents from June 5 through August 15, 2020. Invitations were also posted to the online AARConnect Leadership group and on AARC social media channels.

Responses are summarized in the Results section of this report. The IBM SPSS Statistics Subscription version 29.0.2.0 software package was used to analyze survey responses for this study.

RESULTS

One hundred sixty-three (163) directors responded in time to have their responses included in analysis. Forty-five postcards were returned due to bad addresses. An exact response rate could not be calculated because of overlap between the postcard list and social media membership. The estimated proportion of the population of acute care hospitals from which a response was received was 6%.

Geographic Groupings

Geographic information was collected from respondents by a survey question that asked for the zip code of the organization in which respiratory care services were provided. Zip code information was recoded to identify the state for each set of responses. Forty-five states were represented by at least one respondent. There were no responses from the states of Alaska, New Mexico, Rhode Island, South Dakota, Washington or the District of Columbia.

Figure 2 plus Table 40 in Appendix C describe the number of hospitals from each state. Missouri, Kansas, and Texas were the top three states in survey participation.

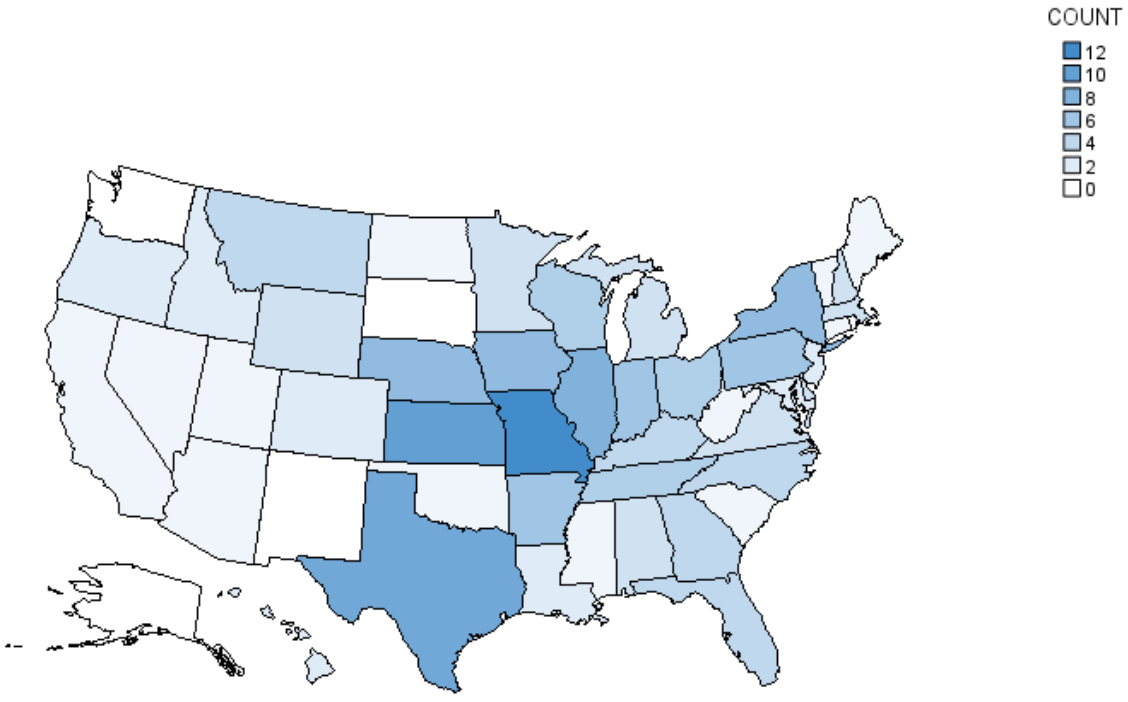


Figure 2. Distribution of respondents by state

Figure 2 (Table 41 in Appendix C) grouped states by four regions while Figure 3 (Table 42 in Appendix C) organized them by nine census divisions.

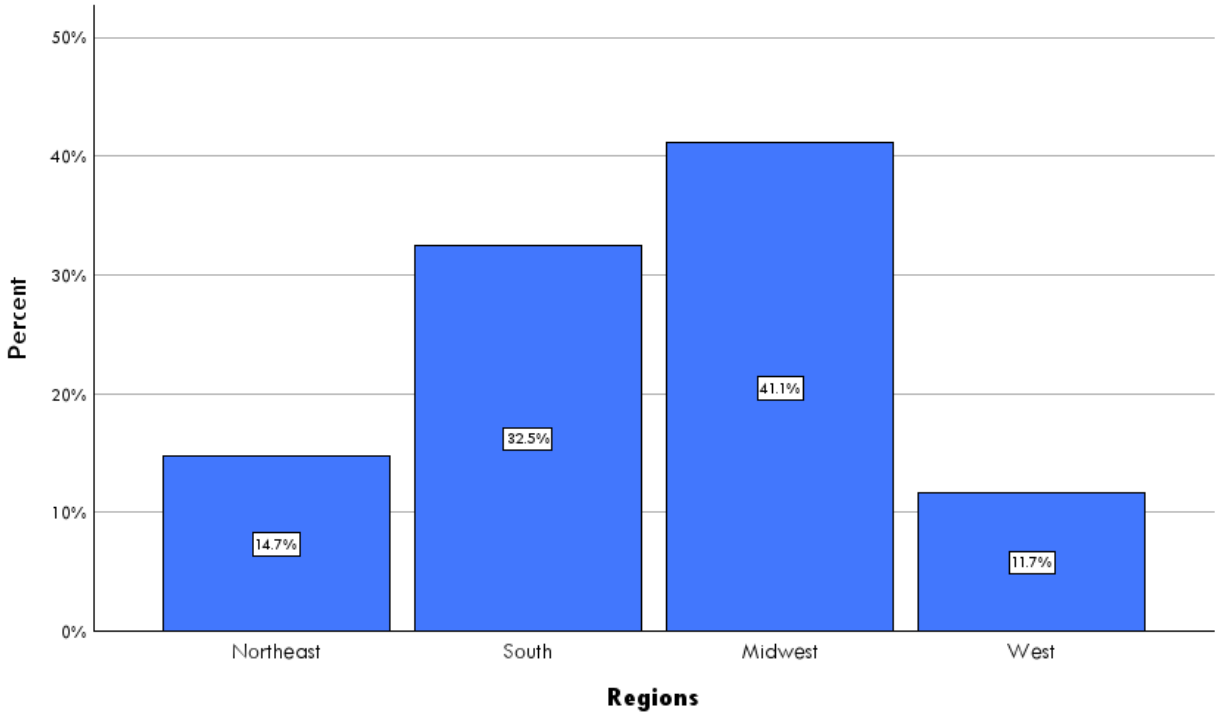


Figure 3. Distribution of respondents by region

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

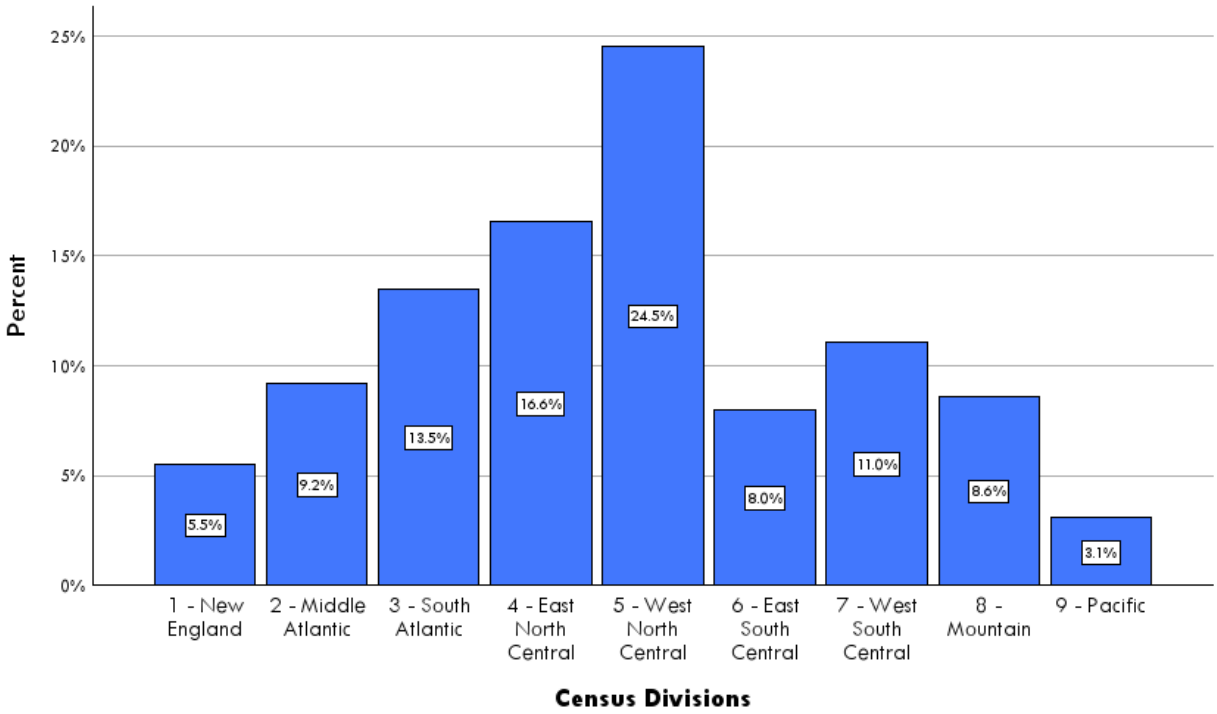


Figure 4. Distribution of respondents by census division

*Divisions from US Census Bureau:

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

Using a population of 100,000 as the threshold between rural and urban communities, approximately seven out of every ten respondents worked at hospitals located in rural settings according to Figure 5. Frequencies can be found in Appendix C, Table 43.

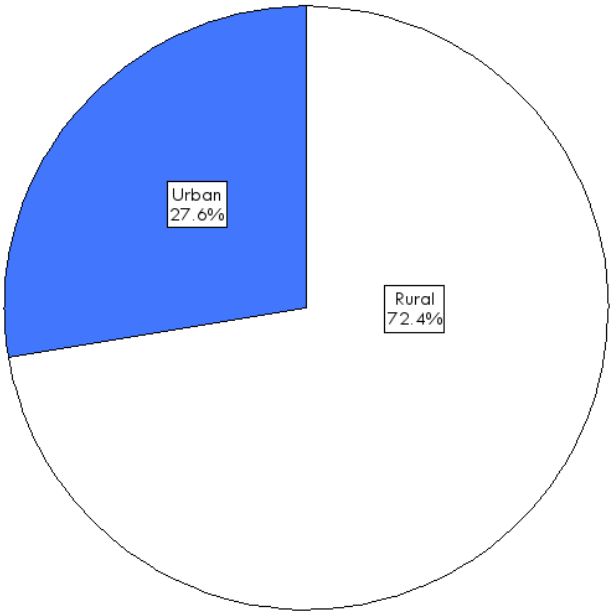


Figure 5. Distribution of urban and rural facilities

Critical Access Hospitals

1. Is this facility designated as a Critical Access Hospital by CMS?

The valid percentage of "Yes" responses was 33.8%. Because the CMS criteria are strict for designation as a critical access hospital, this set of responses appeared to reflect the low percentage that was expected. Frequencies can be found in Appendix C, Table 42.

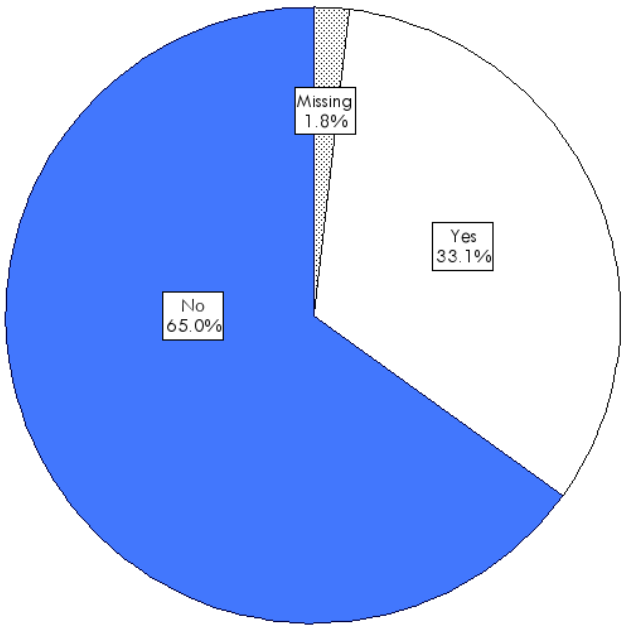


Figure 6. Distribution of Critical Access Hospitals

Cost Centers

2. For how many cost centers is the Respiratory Therapy Manager responsible?

According to Table 1, the typical manager of respiratory therapy was responsible for three cost centers within the hospital. Frequencies can be found in Appendix C, Table 43.

Table 1. Number of Cost Centers for which the Respiratory Therapy Manager is responsible

N							
Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
160	3	2.93	.13	3.00	1.62	1	8

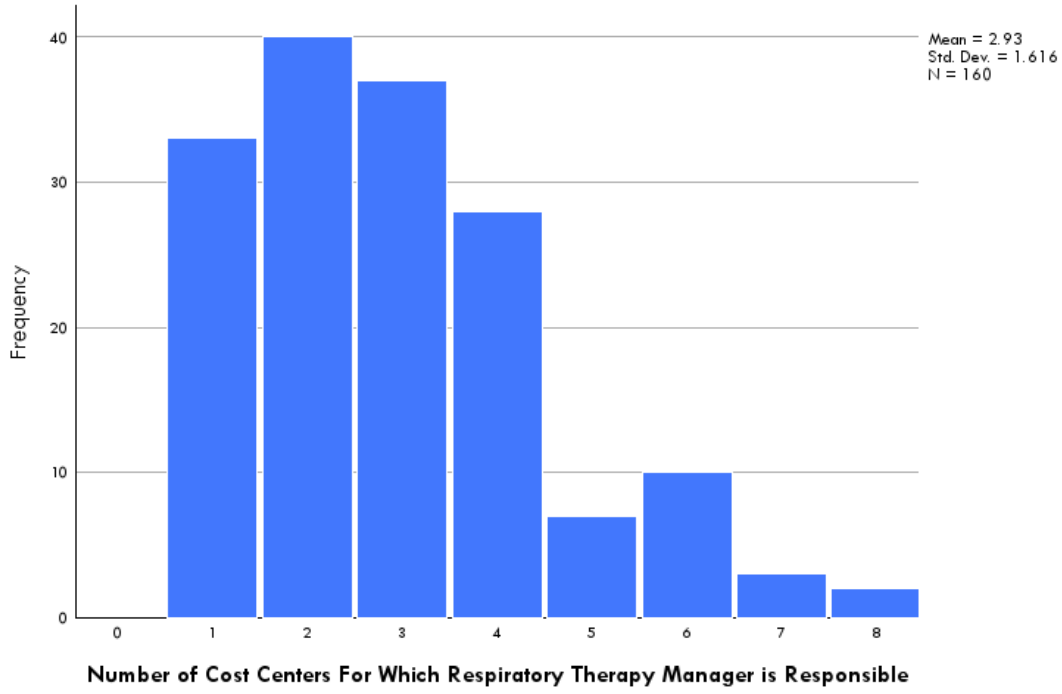


Figure 7. Number of Cost Centers for which the Respiratory Therapy Manager is responsible

Departments for which the Respiratory Therapy Manager is Responsible

3. Please indicate the departments for which the Respiratory Therapy Manager is responsible. *Select all that apply*.

Respondents were asked to specify each department for which the Respiratory Therapy Manager was responsible. Virtually every manager was responsible for respiratory care. Over two thirds of managers were responsible for the pulmonary function lab. Hence, (1) respiratory care and (2) the

pulmonary function lab were the typical departments for which managers were responsible. A little more than one third of these respondents were responsible for sleep medicine while nearly one quarter were responsible for neurodiagnostics. Some additional descriptors (Blood Gas Lab, Hyperbaric Medicine, NICU, Pulmonary Clinic, and Rehabilitation (PT, OT, Speech)) were created based on clusters of free text provided after a respondent had selected the 'Other' response. Frequencies can be found in Appendix C, Table 43. Other departments listed by survey respondents are described in Appendix D.

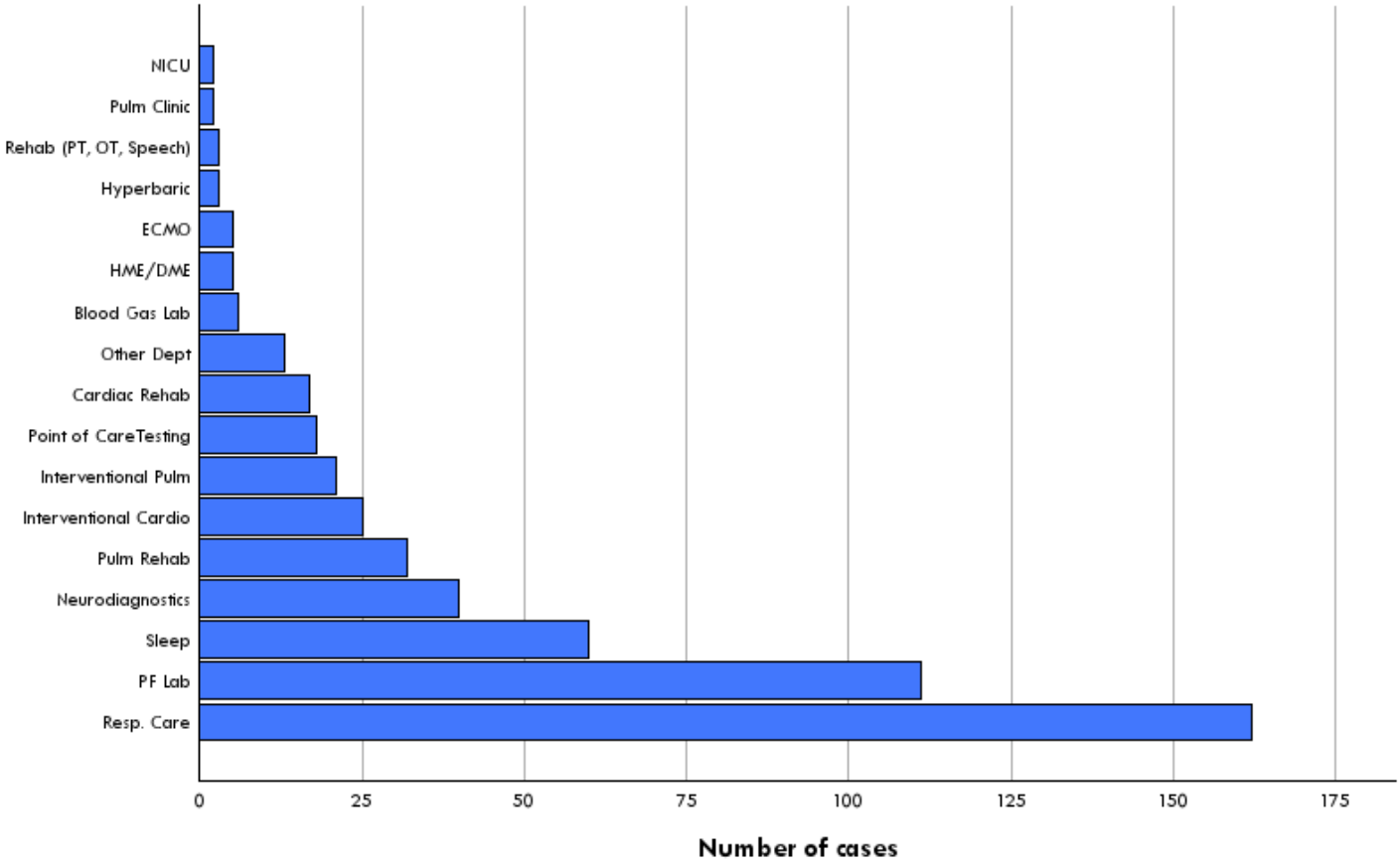


Figure 8. Departments for which the Respiratory Care Manager is Responsible

Hiring Practices and Goals

4. To what degree is increasing the proportion of baccalaureate-prepared respiratory therapists a goal of your department?

Respondents were presented with a sliding scale tool and asked to provide a response between 0 (Low priority) and 100 (High priority). While there were a few respondents who indicated this was of the highest priority, the modal (most frequently occurring) response was zero plus the mean and median were 33 and 26, respectively. If one intended to summarize the typical response, then one would say that having baccalaureate-prepared respiratory therapists was a low priority among respondents representing these hospitals. Frequencies can be found in Appendix C, Table 44.

Table 2. Degree to which increasing proportion of baccalaureate-prepared therapists is a goal of the department

N							
Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
163	0	33.48	2.54	26.00	32.39	0	100

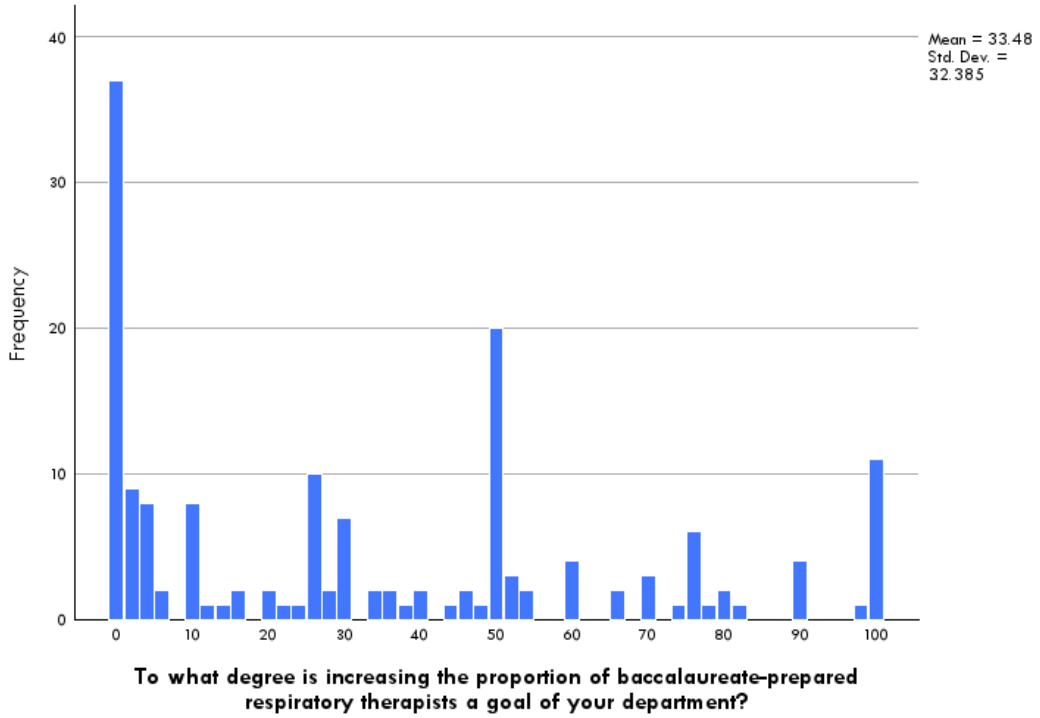


Figure 9. Degree to which increasing baccalaureate-prepared therapists is a goal of the department

5. Does your department differentiate work assignments based on whether staff therapists have earned the CRT or RRT credentials?

The valid percent of "Yes" responses was 17.8, which meant that more than 4 out of every 5 respondents made no differentiation between work assigned to therapists with CRT and RRT credentials. Frequencies can be found in Appendix C, Table 45.

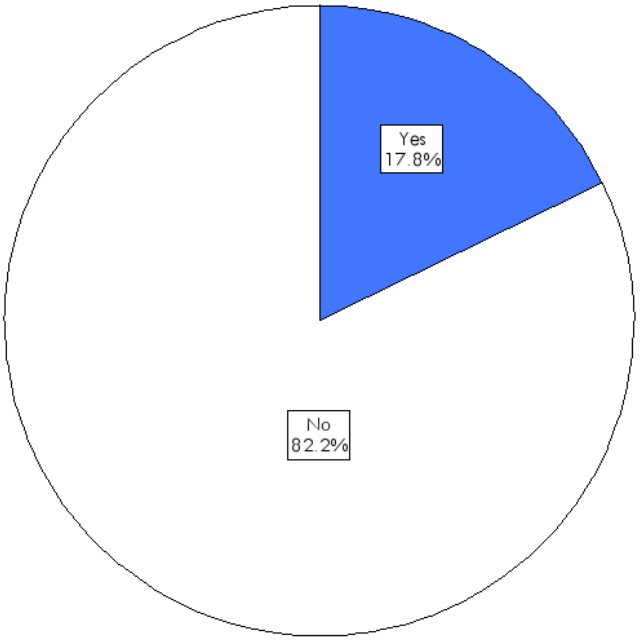


Figure 10. Differentiation of work assignments based on credential

6. Does your department exclusively staff therapists with the RRT credential?

The valid percent of "Yes" responses was 41.1, which meant that a majority of hospitals represented by these respondents included CRTs and RRTs in their local workforces. Frequencies can be found in Appendix C, Table 46.

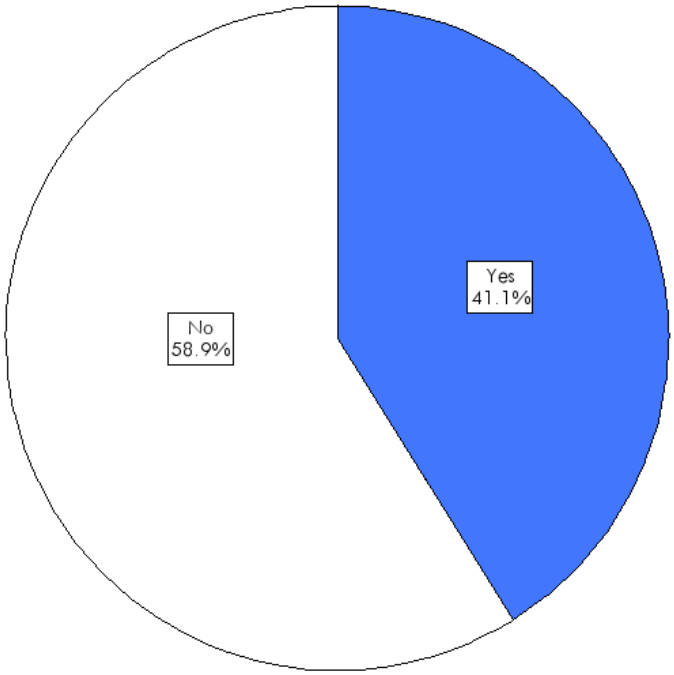


Figure 11. RRT Requirement for employment

7. Are new graduates required to attain the RRT credential within a predetermined time after the start of their employment with your organization?

The valid percent of "Yes" responses was 58.3, which meant a majority do systematically encourage new graduates to attain the RRT credential. Frequencies can be found in Appendix C, Table 47.

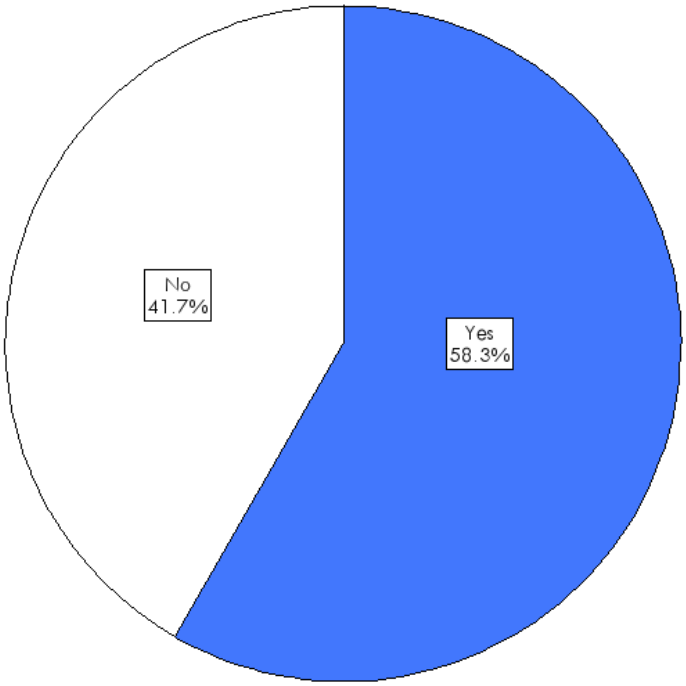


Figure 12. RRT attainment requirement

8. Upon hire, what is the time frame in which a new graduate is required to attain the RRT?

Respondents who had positively responded to the previous question were asked to specify how long new hires were given to achieve the RRT. The 'RRT Required for Hire' option was created based on clusters of free text provided after a respondent had selected the 'Other' response. Most organizations required therapists to earn the credential within six months of hire. Frequencies can be found in Appendix C, Table 48. Other responses can be found in Appendix D.

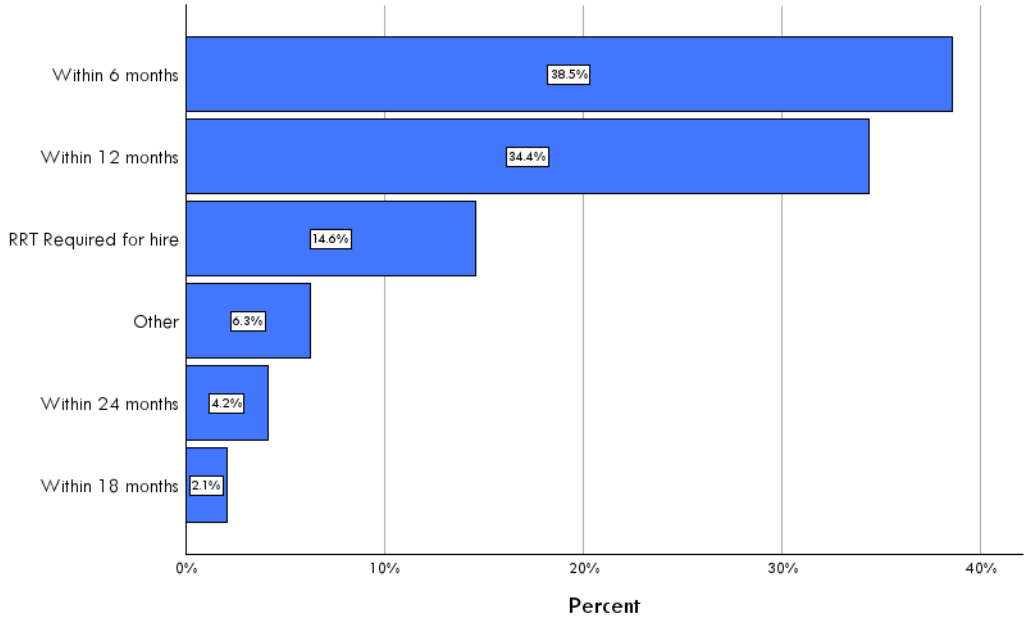


Figure 13. Time frame to earn RRT credential after hire

FTE Positions

9. What is the total number of FTEs employed in both therapist and other positions, for which the Respiratory Therapy Department Director is responsible?

Figure 14 showed a skewed distribution, so the mean value in Table 3 was pulled up toward the extremely high responses. One would usually gravitate toward the median value to describe what was typical, but the wide range plus the skewed distribution of values discourages that approach to this distribution. It is probably best to refer to the 18 to 33 range as representing what was the typical response.

Table 3. Number of FTEs for which the Department Director is responsible

N		Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
Valid	Missing						
135	28	33.56	3.42	18.00	39.73	0	200

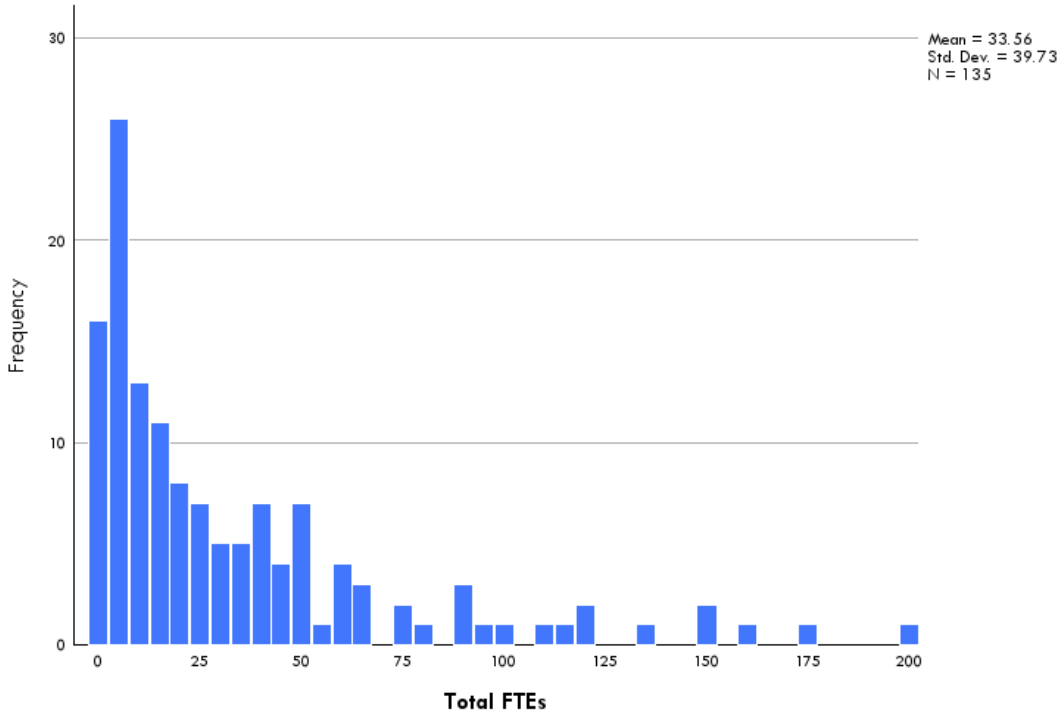


Figure 14. Total FTEs for which the Director is responsible

10. How many FTEs does your organization budget or contract for Staff Therapist positions held by respiratory therapists this fiscal year?

Projecting the population of staff therapists in acute care hospitals was complicated by the fact that 28 people gave no response to this survey item. An important question was why they would behave this way. Speculating that at least some of them had no staff therapists and they skipped this item since they did not find that it applied to their circumstances, we produced a more conservative estimate in the second row of Table 4.

Table 4. Estimates of FTEs budgeted for Staff Therapist positions

N							
Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
135	28	28.16	3.62	10.90	42.05	0	304
163*	0	23.33	3.11	6.80	39.70	0	304

*Missing responses were converted to zero values under the expectation that at least some of these respondents skipped the question rather than enter a value of zero. Doing so produced a more conservative population estimate.

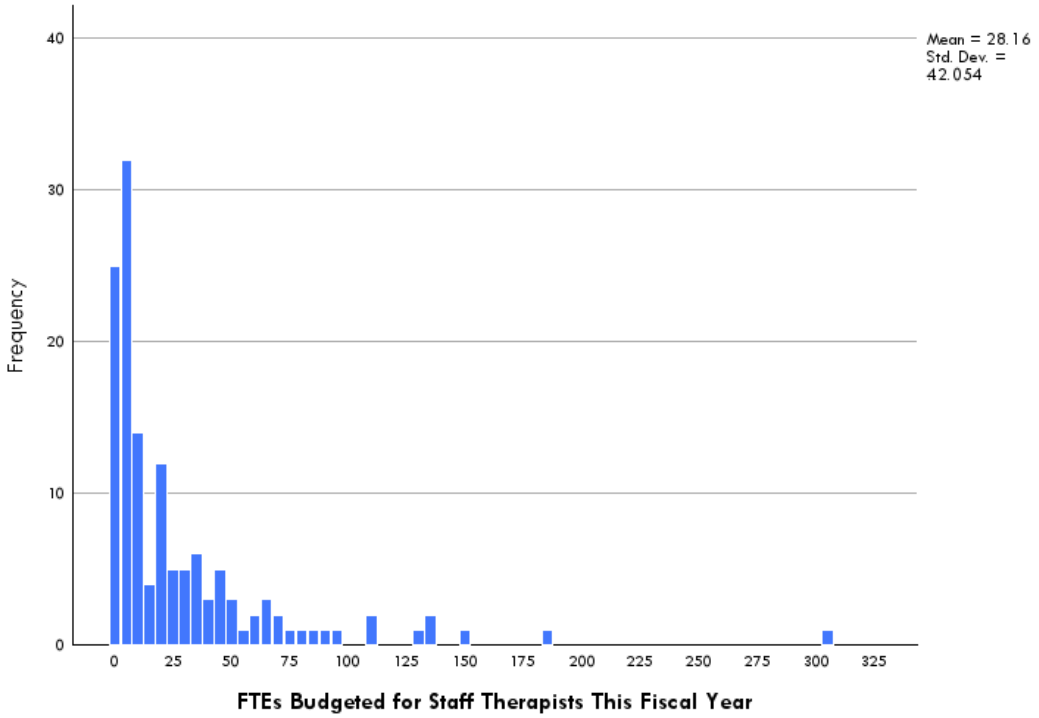


Figure 15. FTEs the organization budgeted for therapist positions this fiscal year

11. How many FTEs does your organization budget or contract for the following job titles held by respiratory therapists this fiscal year?

Table 5 revealed substantial numbers of missing responses for some of these positions. The tendency to overestimate the population was made clearer by focusing on the Director / Manager row in Table 5. Typically, a respiratory care department had 1 person in charge of the operation. Yet the mean value was closer to 2. Therefore, the more conservative set of estimations in Table 6 were likely closer to the truth for each of these positions.

Respondents were given the following descriptions in the survey for job positions listed throughout this report:

- Director/Manager is defined as a respiratory therapist who is the top manager of this department
- Supervisor/Shift lead is defined as a respiratory therapist other than the director who evaluates the performance of other employees
- Non-supervisory, management support staff who are respiratory therapists, but are not included in other titles (e.g., clinical specialist, research coordinator)
- Sleep Technologist/Specialist
- Pulmonary Function Technologist
- Other diagnostic technologist (e.g., noninvasive cardiology)
- Department Educator is defined as the person who coordinates continuing education and staff development
- Disease Manager/Patient Educator

Table 5. First estimates of total budgeted FTEs in 2024 by position

	N							
	Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
Director/Manager	136	27	1.73	.36	1.00	4.20	.0	43.2
Supervisor/Shift lead	123	40	1.74	.20	1.00	2.21	.0	12.0
RT Support Staff	115	48	5.72	1.24	1.00	13.35	.0	90.0
Sleep Tech/Spec	100	63	1.79	.40	.00	4.00	.0	24.0
Pulm Function Tech	114	49	1.63	.21	1.00	2.28	.0	12.0
Diagnostic Tech	92	71	1.07	.27	.00	2.58	.0	14.6
Department Educator	97	66	.45	.07	.00	.66	.0	3.0
Disease Mgr/Pt educator	89	74	.29	.07	.00	.63	.0	3.0

Table 6. Conservative estimates of total budgeted FTEs in 2024 by position*

	N							
	Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
Director/Manager	163	0	1.45	.30	1.00	3.89	.0	43.2
Supervisor/Shift lead	163	0	1.31	.16	.80	2.06	.0	12.0
RT Support Staff	163	0	4.03	.90	.00	11.50	.0	90.0
Sleep Tech/Spec	163	0	1.10	.25	.00	3.25	.0	24.0
Pulm Function Tech	163	0	1.14	.16	.00	2.05	.0	12.0
Diagnostic Tech	163	0	.60	.16	.00	2.01	.0	14.6
Department Educator	163	0	.27	.04	.00	.56	.0	3.0
Disease Mgr/Pt educator	163	0	.16	.04	.00	.49	.0	3.0

*Missing responses were converted to zero values under the expectation that at least some of these respondents skipped the question rather than enter a value of zero. Doing so produced a more conservative population estimate.

Figure 16 shows that most respondents reported one director position occupied by a respiratory therapist.

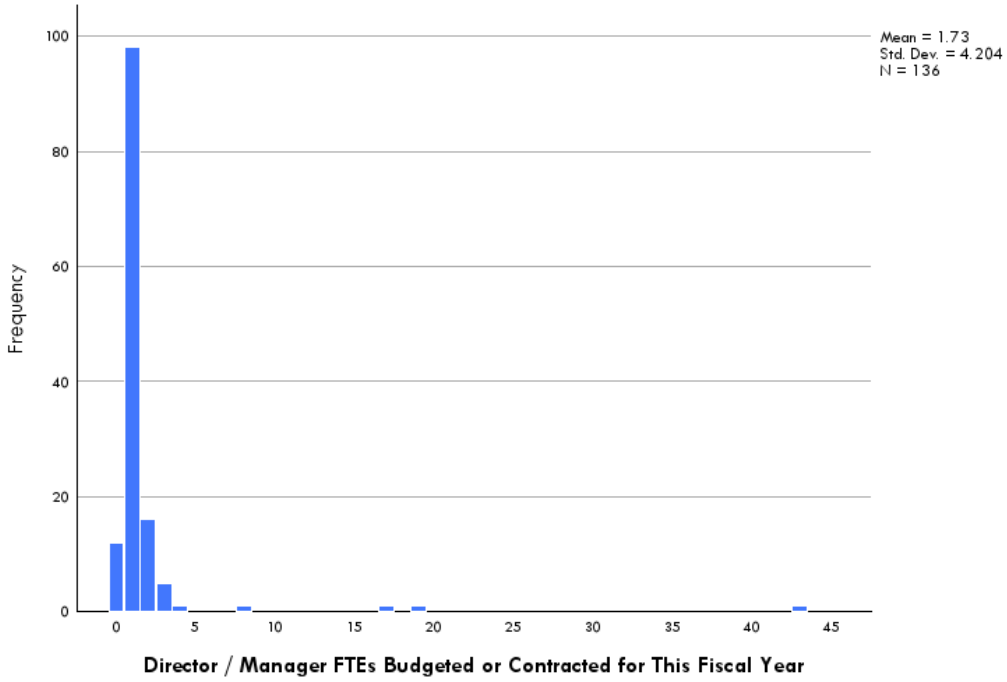


Figure 16. Director/Manager FTEs

According to Figure 17, a hospital that had more than zero respiratory therapists in supervisor positions tended to have one therapist in such positions.

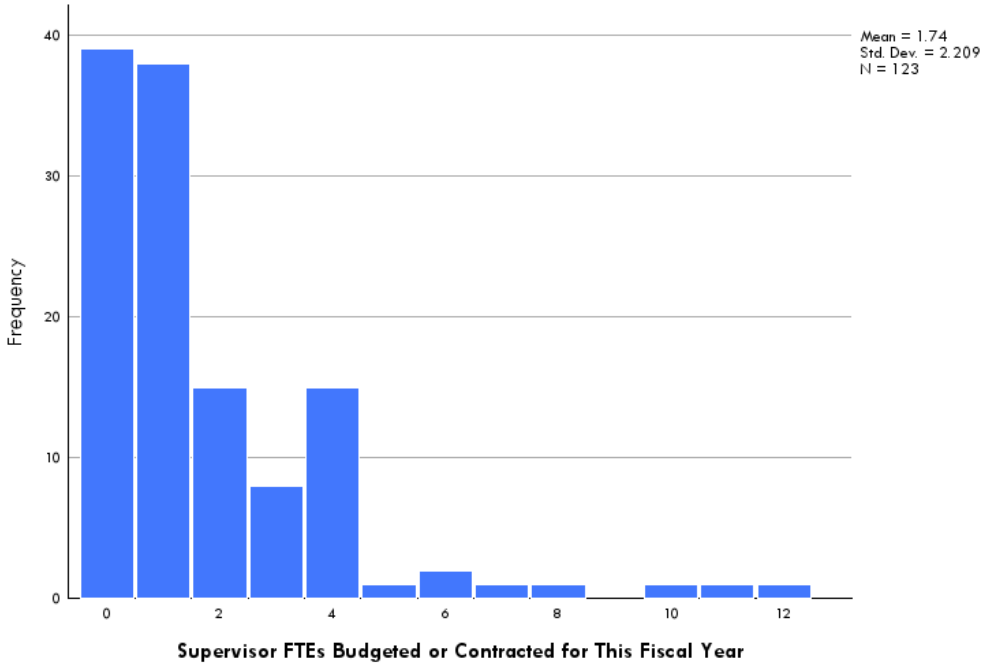


Figure 17. Supervisor FTEs

Most respondents reported having five or fewer positions occupied by respiratory therapists for non-supervisory support according to Figure 18.

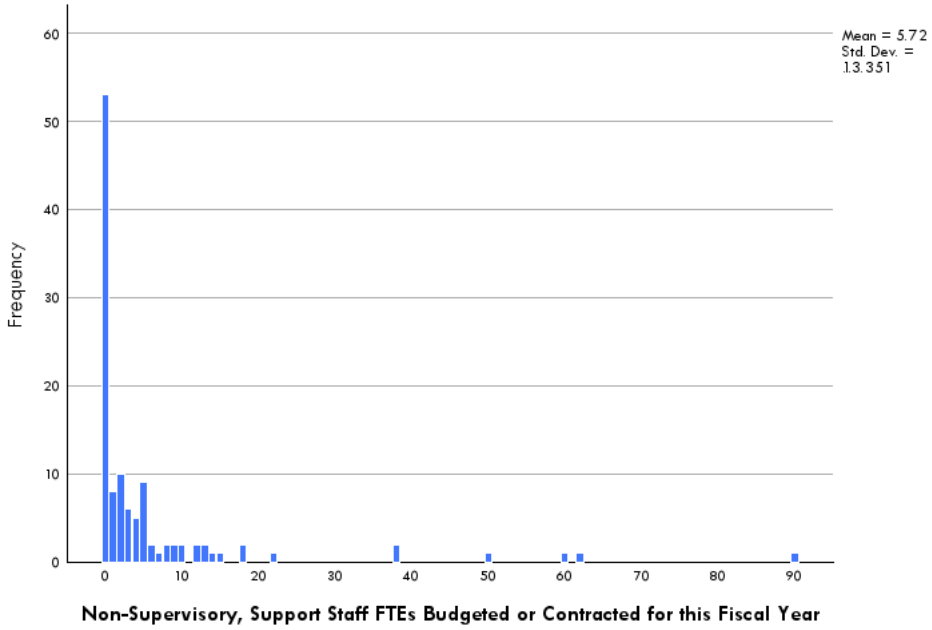


Figure 18. Support FTEs

Most respondents reported four or fewer positions occupied by respiratory therapists for sleep technologists or specialists as Figure 19 shows.

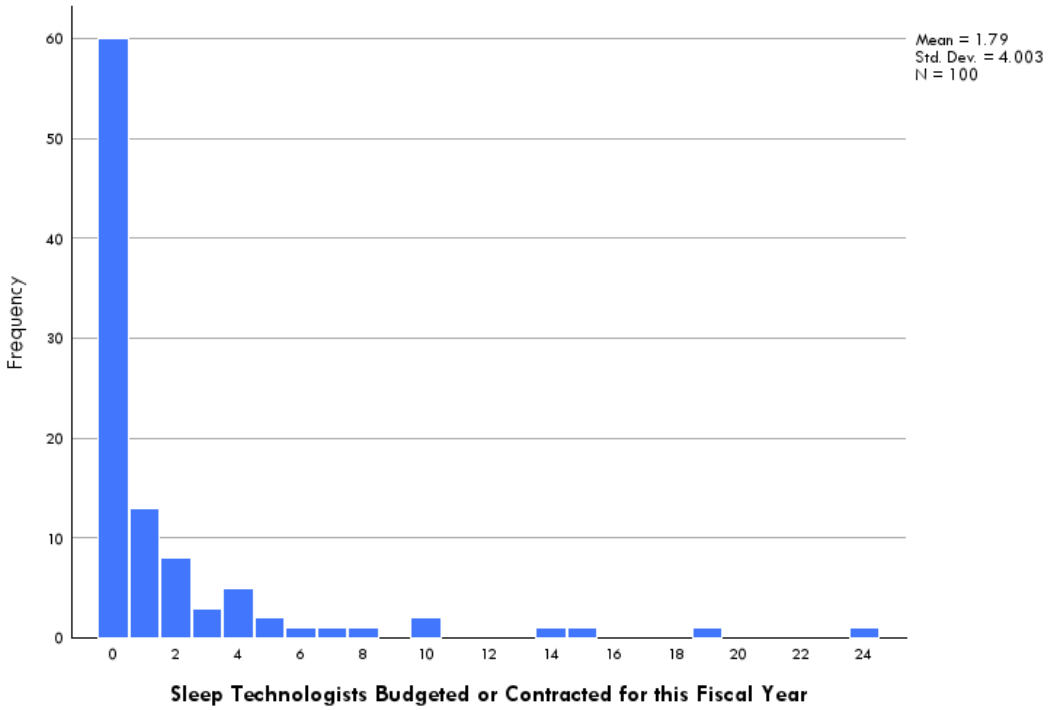


Figure 19. Sleep Technologist FTEs

According to Figure 20, most respondents reported having zero positions or one position for pulmonary function technologists.

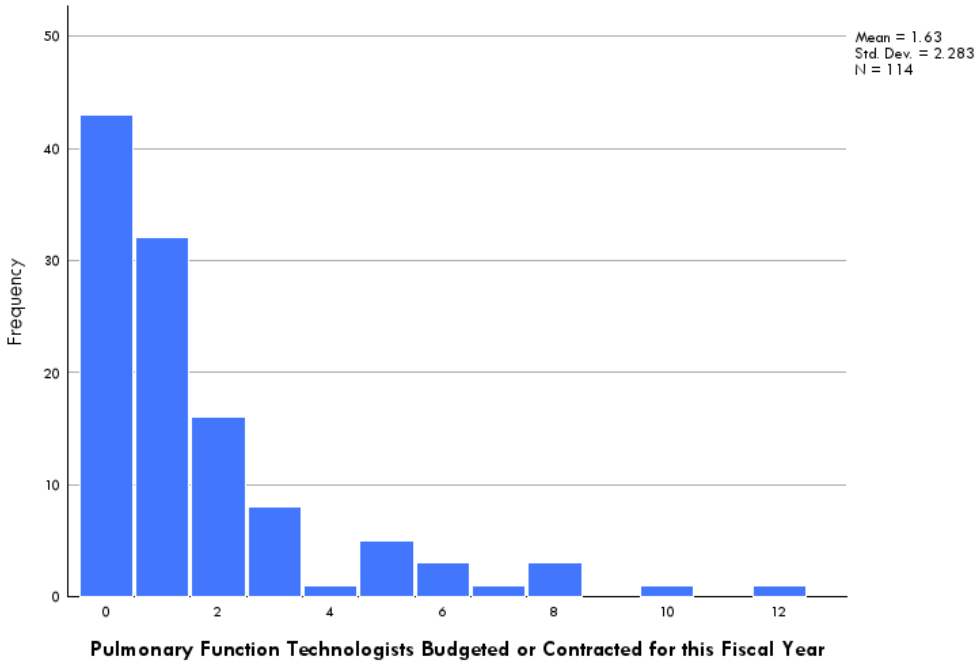


Figure 20. Pulmonary Function Technologist FTEs

Most respondents reported zero positions occupied by respiratory therapists for other diagnostic technologists as Figure 21 shows.

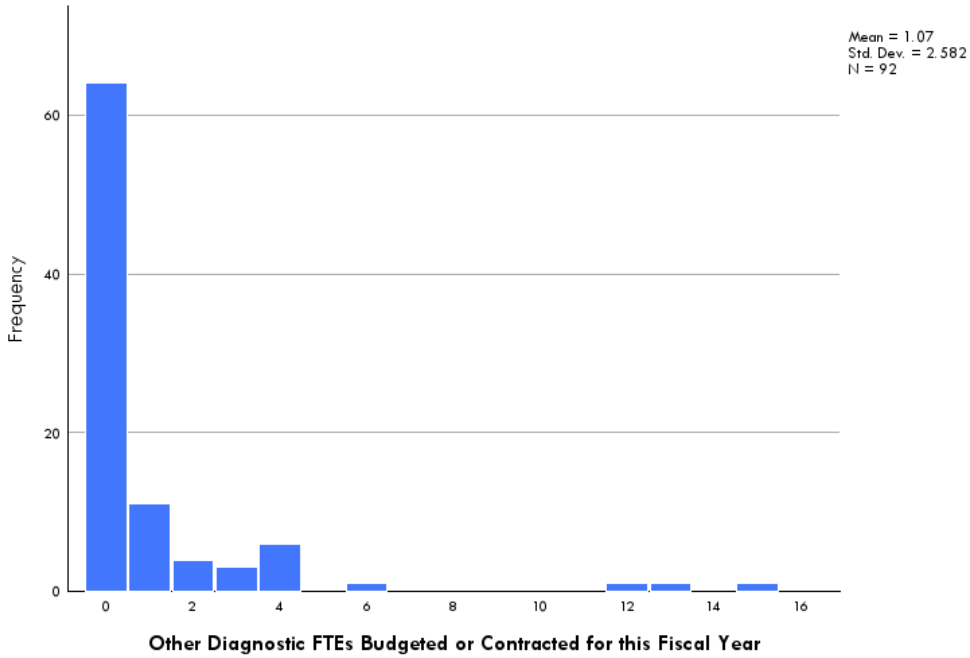


Figure 21. Other Diagnostic FTEs

According to Figures 22 and 23, most respondents reported that they did not employ respiratory therapists in department educator or disease manager/patient educator positions. Among the hospitals that did, there tended to be one FTE.

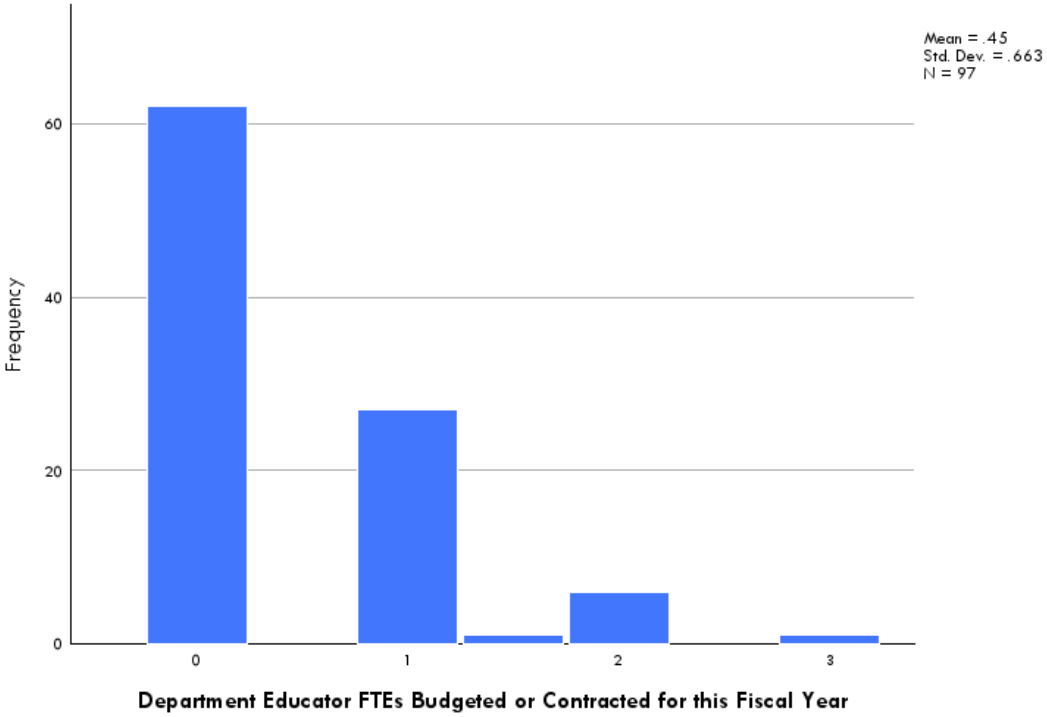


Figure 22. Department Educator FTEs

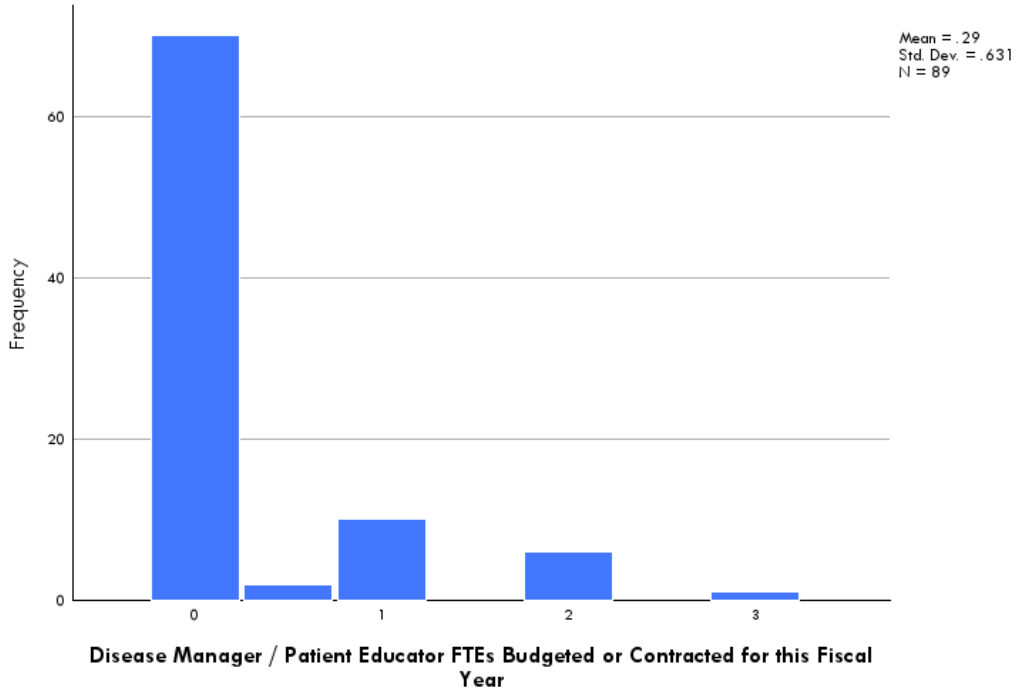


Figure 23. Disease Manager/Patient Educator FTEs

12. How many FTE positions held by respiratory therapists did the organization typically supplement from non-employee pools, or from outside temporary agencies this fiscal year for staff therapists?

Although many respondents reported they did supplement FTEs from non-employee pools, they required coverage for far less than one FTE as Table 7 and Figure 24 showed. A more conservative estimate is offered in the second row of Table 7.

Table 7. First and conservative estimates of supplemental FTE staff therapists

N			Std. Error of				
Valid	Missing	Mean	Mean	Median	Std. Deviation	Minimum	Maximum
130	33	3.09	.88	.00	10.03	.0	93.0
163*	0	2.46	.71	.00	9.03	.0	93.0

*Missing responses were converted to zero values under the expectation that at least some of these respondents skipped the question rather than enter a value of zero. Doing so produced a more conservative population estimate.

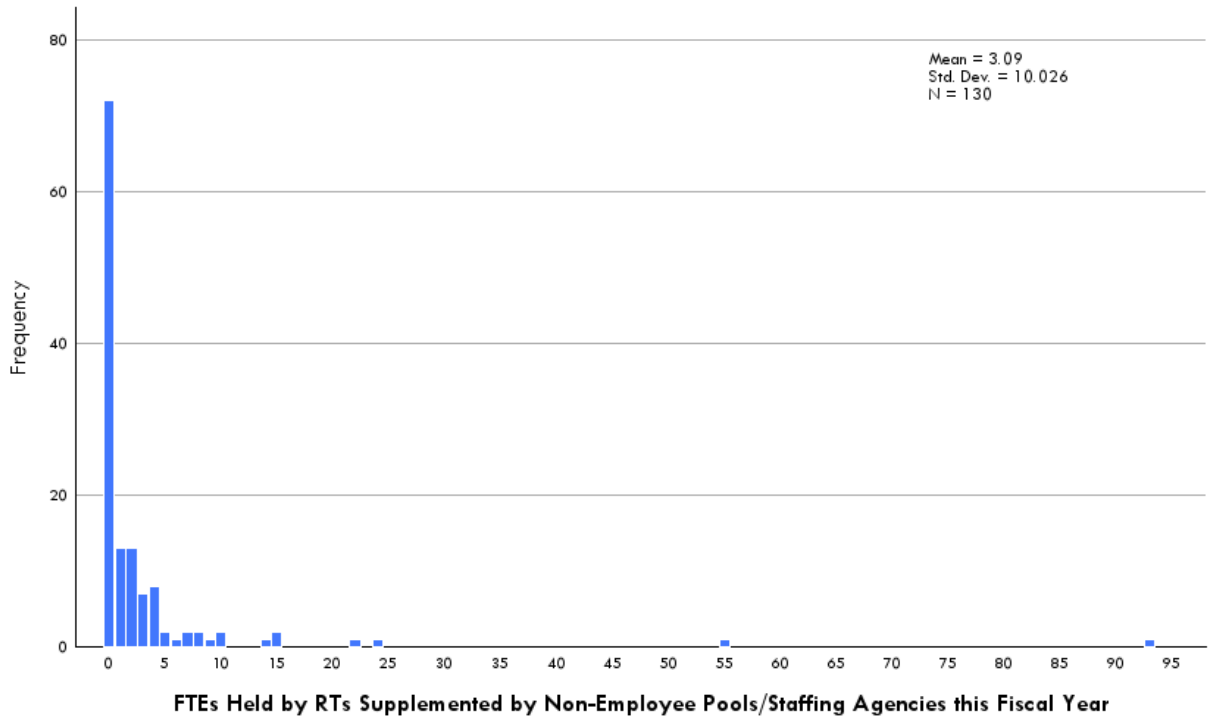


Figure 24. Supplemental Staff Therapist FTEs

13. How many FTEs to be held by respiratory therapists does the organization have vacant for Staff Therapists?

According to the median values, the typical respondent who reported having a vacant position had 1 or 2 such positions at the time that survey responses were collected. As before, at least some of the 33 missing responses likely did not have vacant positions and so they skipped the item rather than enter a value of zero. A more conservative estimate is offered in the second row of Table 8.

According to the mean values described in Table 8, the typical respondent alternatively could be said to have had 4 vacant positions.

Table 8. Estimates of total vacant FTEs in 2024 for Staff Therapists

N			Std. Error of				
Valid	Missing	Mean	Mean	Median	Std. Deviation	Minimum	Maximum
130	33	4.90	.93	1.50	10.59	.0	85.0
163*	0	3.91	.76	.90	9.65	.0	85.0

*Missing responses were converted to zero values under the expectation that at least some of these respondents skipped the question rather than enter a value of zero. Doing so produced a more conservative population estimate.

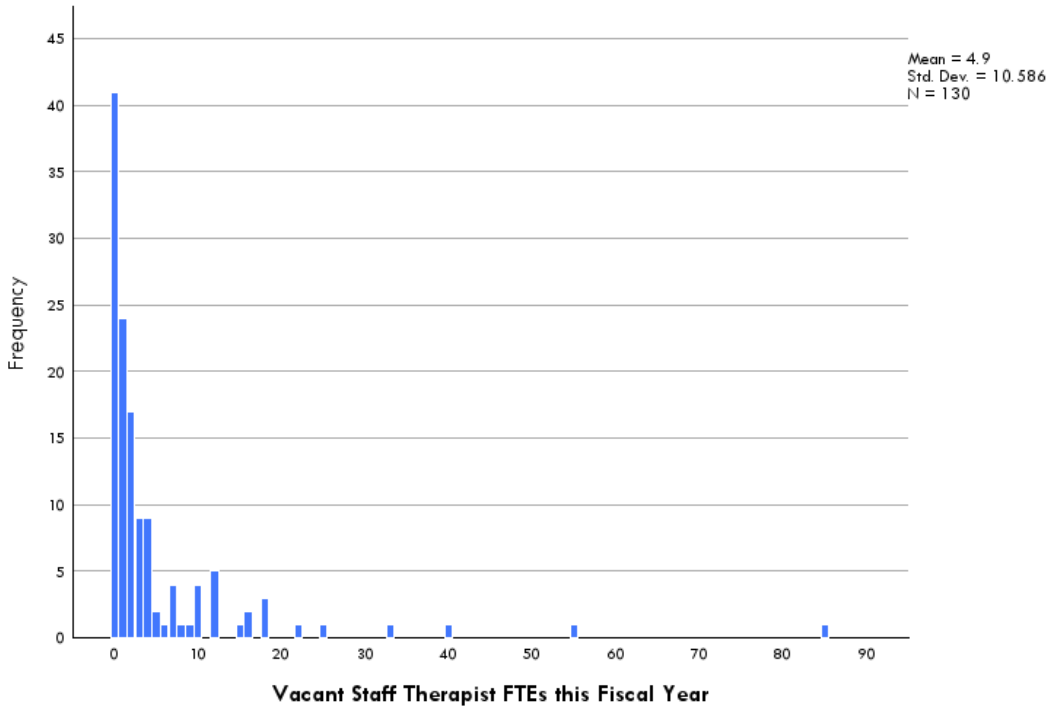


Figure 25. Total Vacant FTEs in 2020 for Staff Therapists

14. How many FTEs to be held by respiratory therapists does the organization have vacant for the following job titles?

Compared to the staff therapist position, vacancies among the other job positions were scarce. Most hospitals had no vacancies among other positions as evidenced by median values of zero and mean values that were close to zero for each position as summarized in Table 9. Foreshadowing a bit about compensation, respiratory therapists in most of these job positions were compensated more than those in the staff therapist position.

Table 9. First estimates of total vacant FTEs in 2024 by position

	N		Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
	Valid	Missing						
Staff Therapist	130	33	4.90	.93	1.50	10.59	0	85
Director/Manager	106	57	.10	.04	.00	.39	.0	3.2
Supervisor/Shift lead	105	58	.17	.05	.00	.50	.0	3.6
RT Support Staff	108	55	.90	.48	.00	4.97	.0	50.0
Sleep Tech/Spec	96	67	.18	.10	.00	.97	.0	9.0
Pulm Function Tech	99	64	.09	.04	.00	.37	.0	3.0
Diagnostic Tech	95	68	.06	.03	.00	.27	.0	2.0
Department Educator	96	67	.01	.01	.00	.10	.0	1.0
Disease Mgr/Pt educator	94	69	.01	.01	.00	.10	.0	1.0

Table 10. Conservative estimates of total vacant FTEs in 2024 by position

	N		Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
	Valid	Missing						
Director/Manager	163	0	.07	.03	.00	.32	.0	3.2
Supervisor/Shift lead	163	0	.11	.03	.00	.41	.0	3.6
RT Support Staff	163	0	.60	.32	.00	4.06	.0	50.0
Sleep Tech/Spec	163	0	.11	.06	.00	.75	.0	9.0
Pulm Function Tech	163	0	.05	.02	.00	.29	.0	3.0
Diagnostic Tech	163	0	.04	.02	.00	.21	.0	2.0
Department Educator	163	0	.01	.01	.00	.08	.0	1.0
Disease Mgr/Pt educator	163	0	.01	.01	.00	.08	.0	1.0

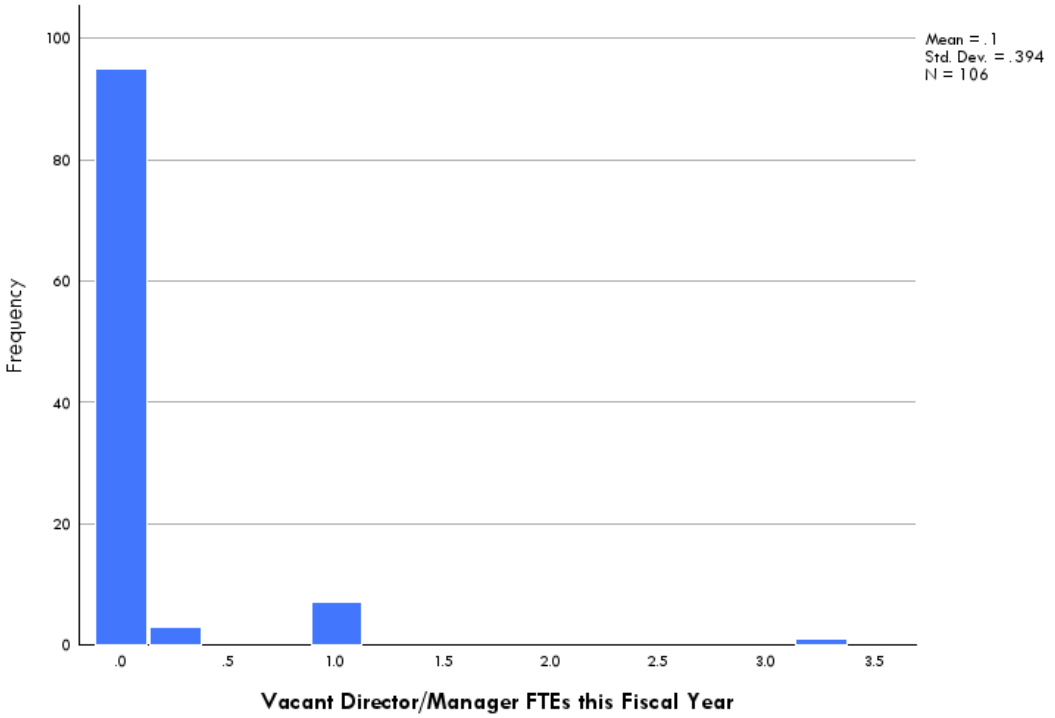


Figure 26. Total Vacant FTEs in 2024 for Directors/Managers

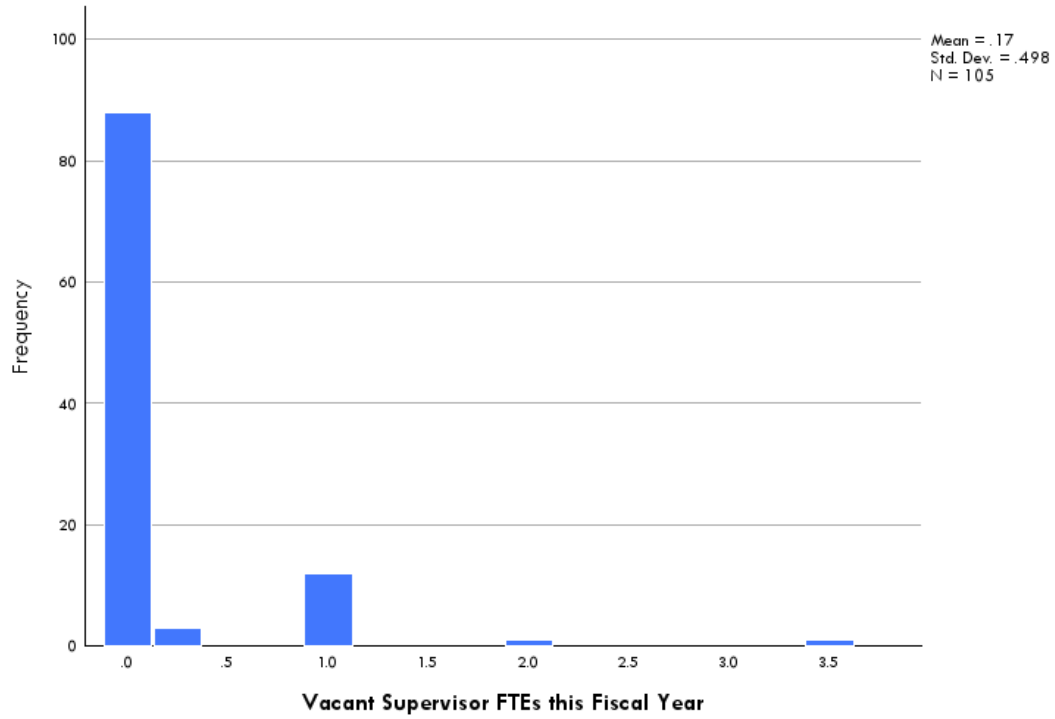


Figure 27. Total Vacant FTEs in 2024 for Supervisors

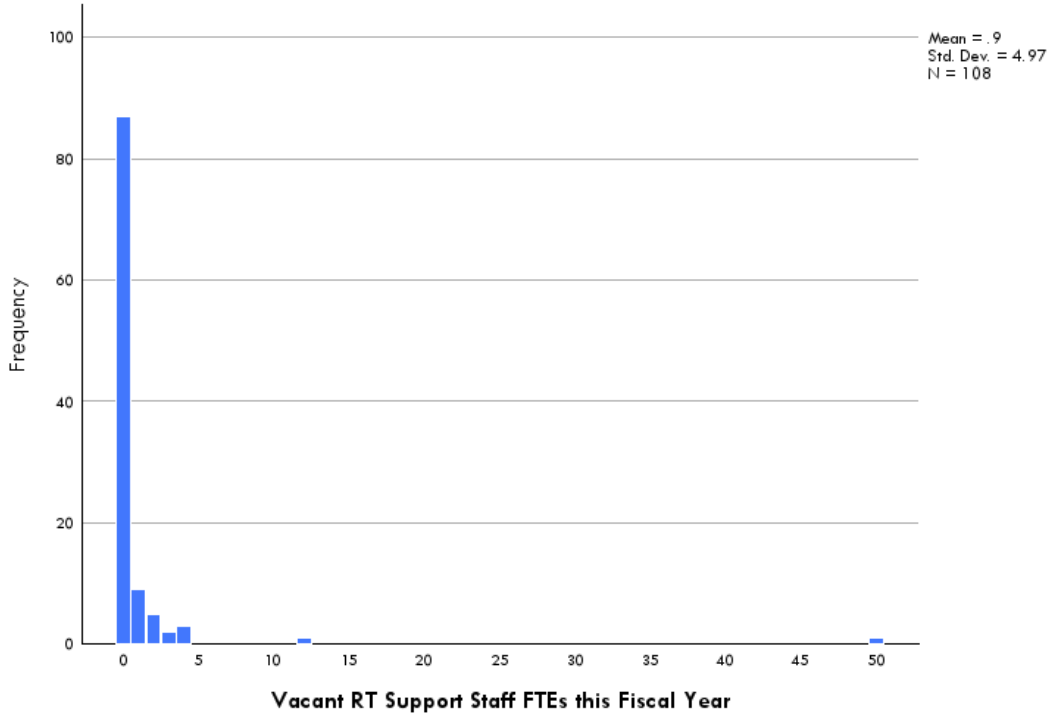


Figure 28. Total Vacant FTEs in 2024 for RT Support Staff

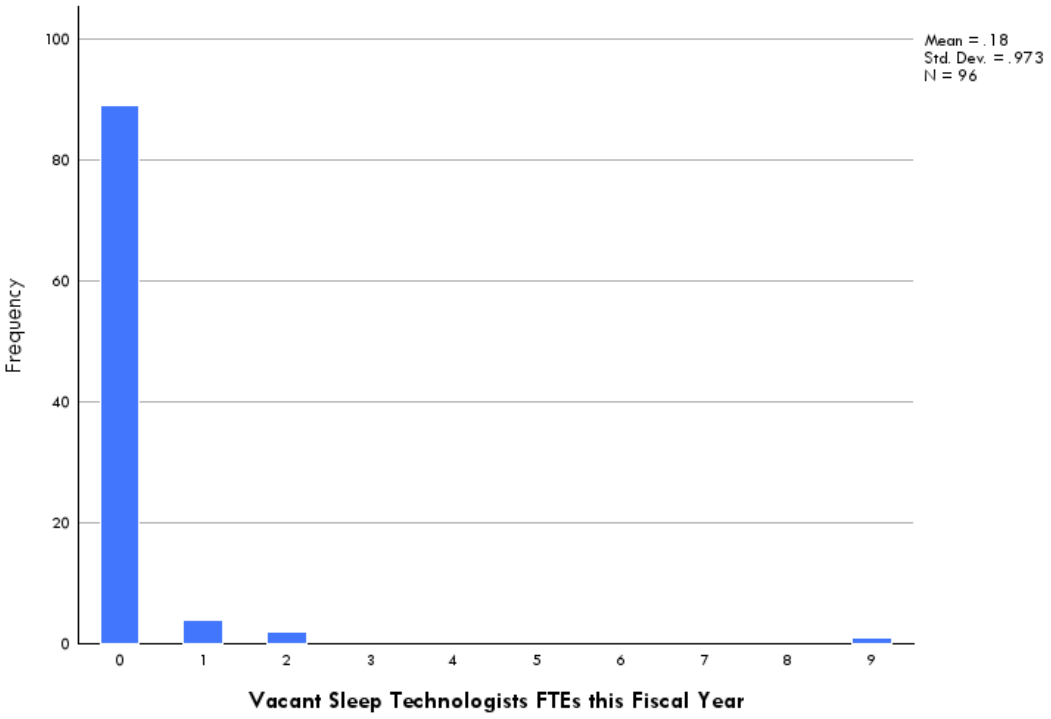


Figure 29. Total Vacant FTEs in 2024 for Sleep Technologists

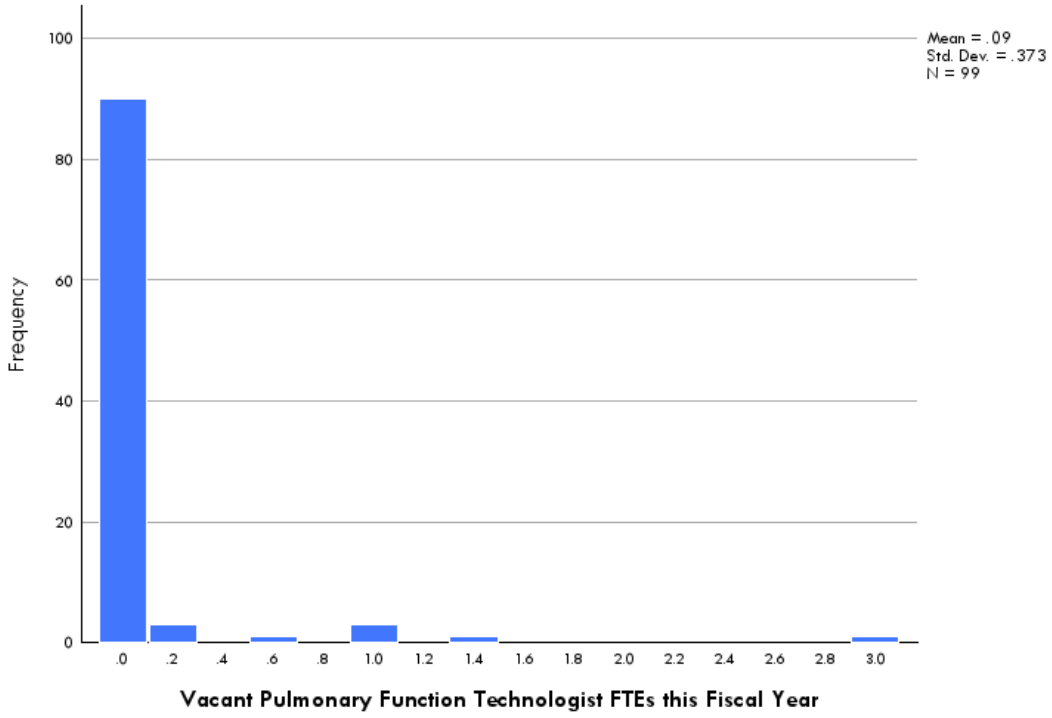


Figure 30. Total Vacant FTEs in 2024 for Pulmonary Function Technologists

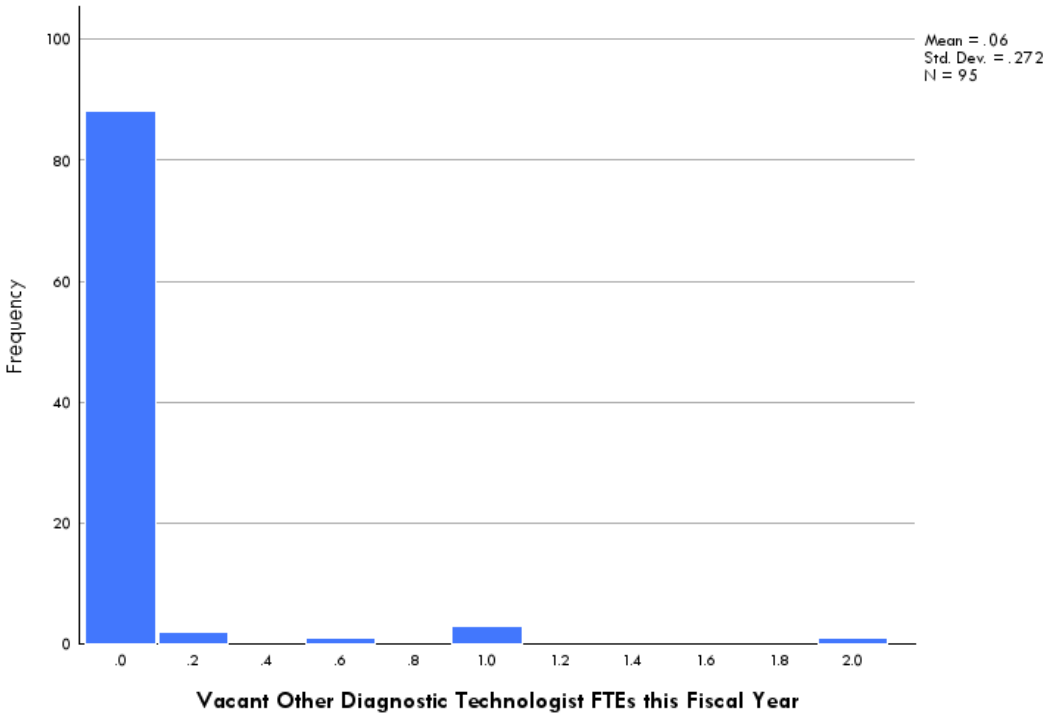


Figure 31. Total Vacant FTEs in 2024 for Other Diagnostic Technologists

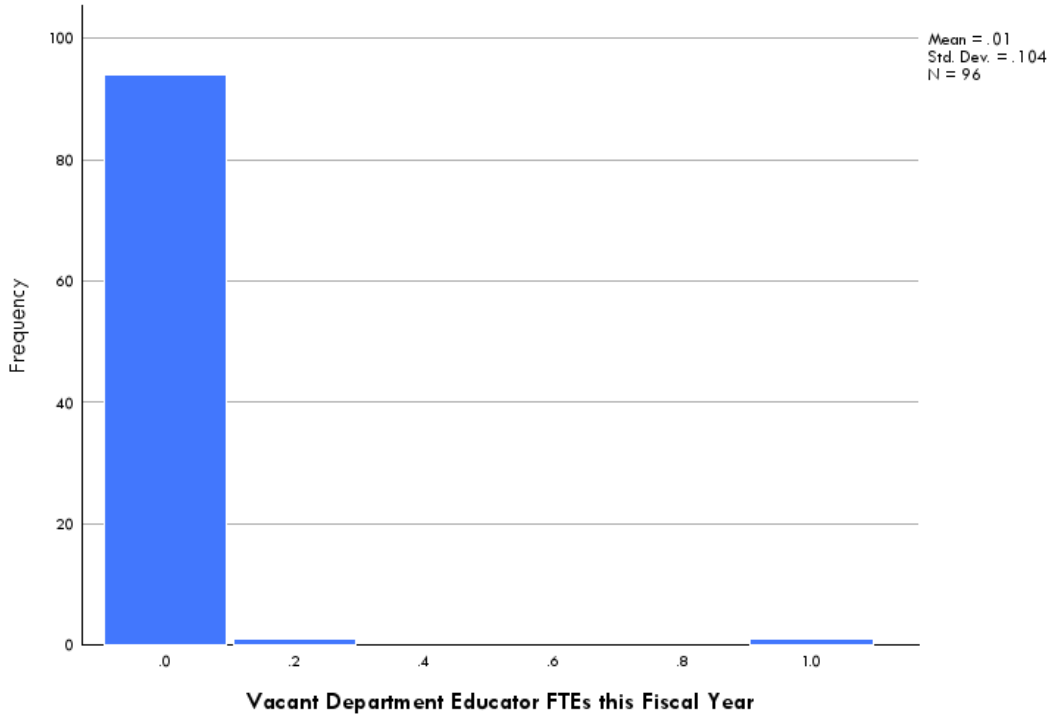


Figure 32. Total Vacant FTEs in 2024 for Department Educators

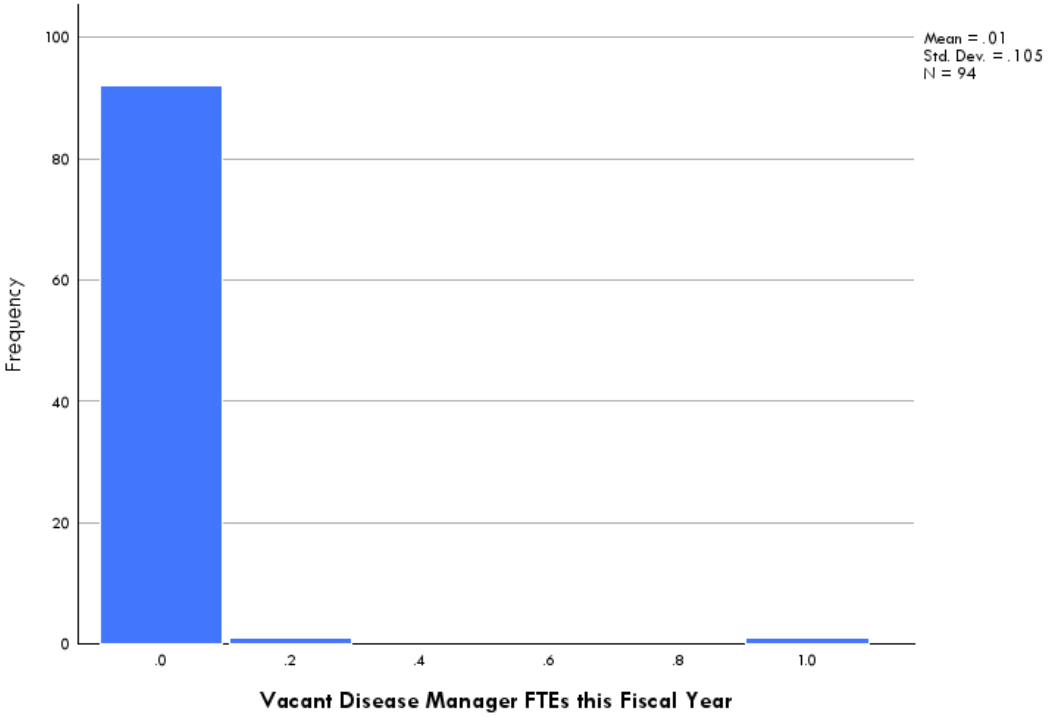


Figure 33. Total Vacant FTEs in 2024 for Disease Managers

15. How many FTEs to be held by respiratory therapists does the organization expect to employ for the year 2025 for Staff Therapists?

Comparing mean values from Table 3 (28.2) and Table 11 (28.7) indicated that respondents expected staff therapist FTEs to be consistent.

Table 11. Estimates of total FTEs expected for Staff Therapists in 2021

N			Std. Error of				
Valid	Missing	Mean	Mean	Median	Std. Deviation	Minimum	Maximum
116	47	28.65	4.00	12.55	43.09	.0	304.0
163*	0	20.39	3.02	5.00	38.57	.0	304.0

*Missing responses were converted to zero values under the expectation that at least some of these respondents skipped the question rather than enter a value of zero. Doing so produced a more conservative population estimate.

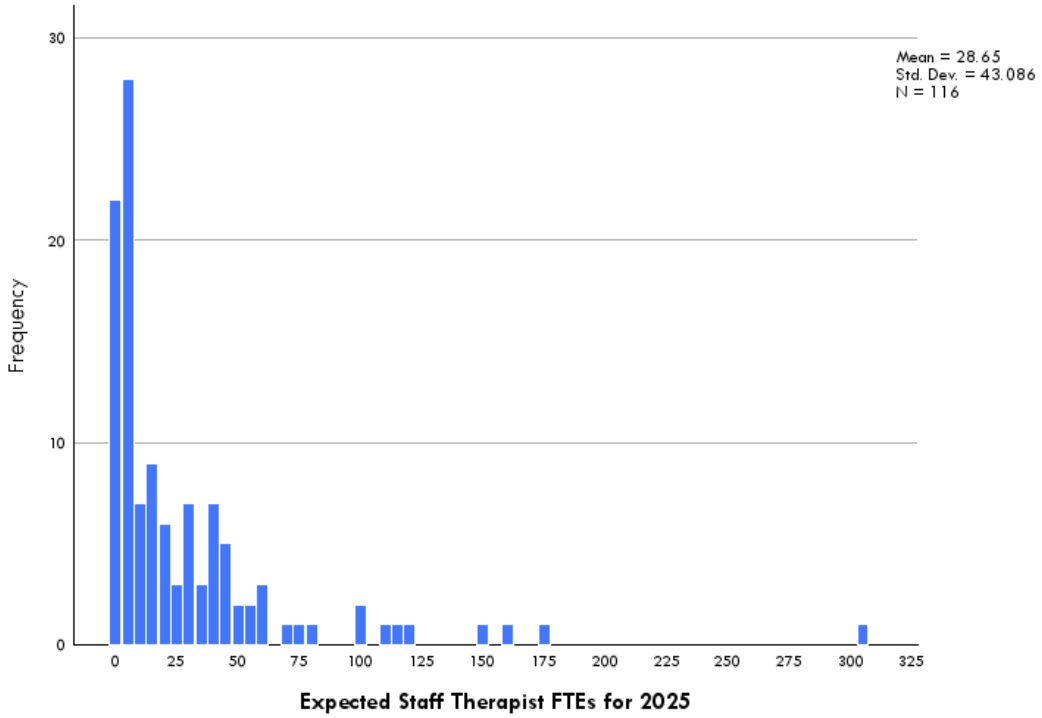


Figure 34. Total FTEs Projected for Staff Therapists in 2025

16. How many FTEs to be held by respiratory therapists does the organization expect to employ for the year 2025 for the following job titles?

Comparisons of each pair of mean values between Table 4 and Table 12 indicated there will be fewer budgeted FTEs for each job position. The strongest negative changes were observed for the sleep (-0.69) and supervisor (-0.51) budgeted positions. The budgeted position showing the least change (-0.03) was the one for RT Support staff.

The AARC may want to monitor decreases in budgeted positions. The monitoring could be a poll that presents the following question:

The 2024 Human Resources Study of acute care hospitals foreshadowed a potential decrease in budgeted job positions held by respiratory therapists. Have you observed reductions in budgeted positions within your department?

Table 12. First estimate of Total Budgeted Positions in 2021

	N							
	Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
Director/Manager	105	58	1.00	.071	1.00	.731	0	4
Supervisor/Shift lead	93	70	1.54	.223	1.00	2.150	0	11
RT Support Staff	92	71	4.54	1.071	.20	10.277	0	56
Sleep Tech/Spec	79	84	1.34	.382	.00	3.400	0	20
Pulm Function Tech	86	77	1.30	.259	.40	2.398	0	12
Diagnostic Tech	76	87	.76	.279	.00	2.428	0	15
Department Educator	79	84	.36	.066	.00	.586	0	2
Disease Mgr/Pt educator	72	91	.28	.074	.00	.625	0	3

Table 13. Conservative estimate of Total Budgeted Positions in 2025

	N							
	Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
Director/Manager	163	0	.64	.06	1.00	.76	.0	4.0
Supervisor/Shift lead	163	0	.88	.14	.00	1.79	.0	10.8
RT Support Staff	163	0	2.56	.63	.00	8.03	.0	56.0
Sleep Tech/Spec	163	0	.65	.19	.00	2.45	.0	20.0
Pulm Function Tech	163	0	.68	.15	.00	1.85	.0	12.0
Diagnostic Tech	163	0	.36	.13	.00	1.70	.0	14.6
Department Educator	163	0	.17	.03	.00	.44	.0	2.0
Disease Mgr/Pt educator	163	0	.12	.03	.00	.44	.0	3.0

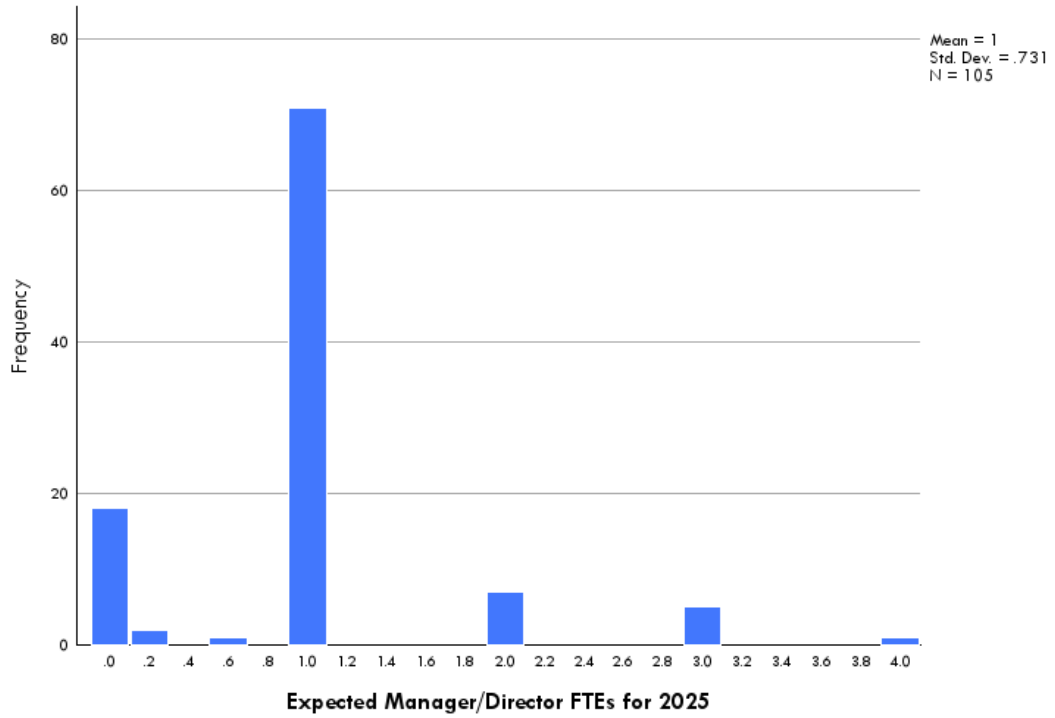


Figure 35. Expected Director/Manager FTEs in 2025

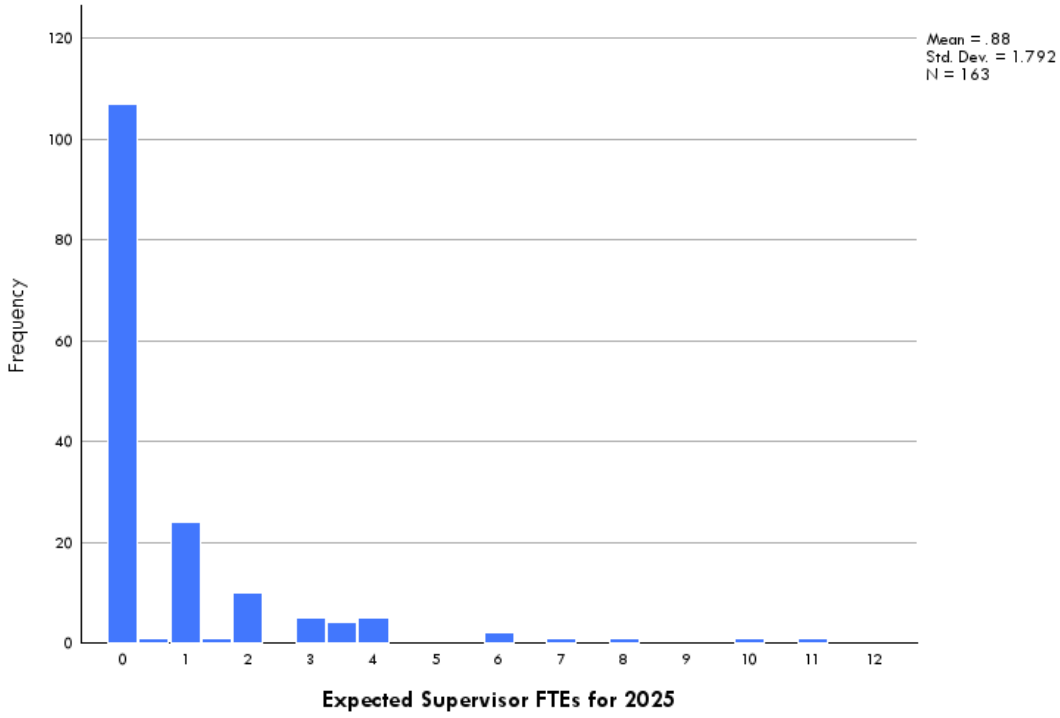


Figure 36. Expected Supervisor FTEs in 2025

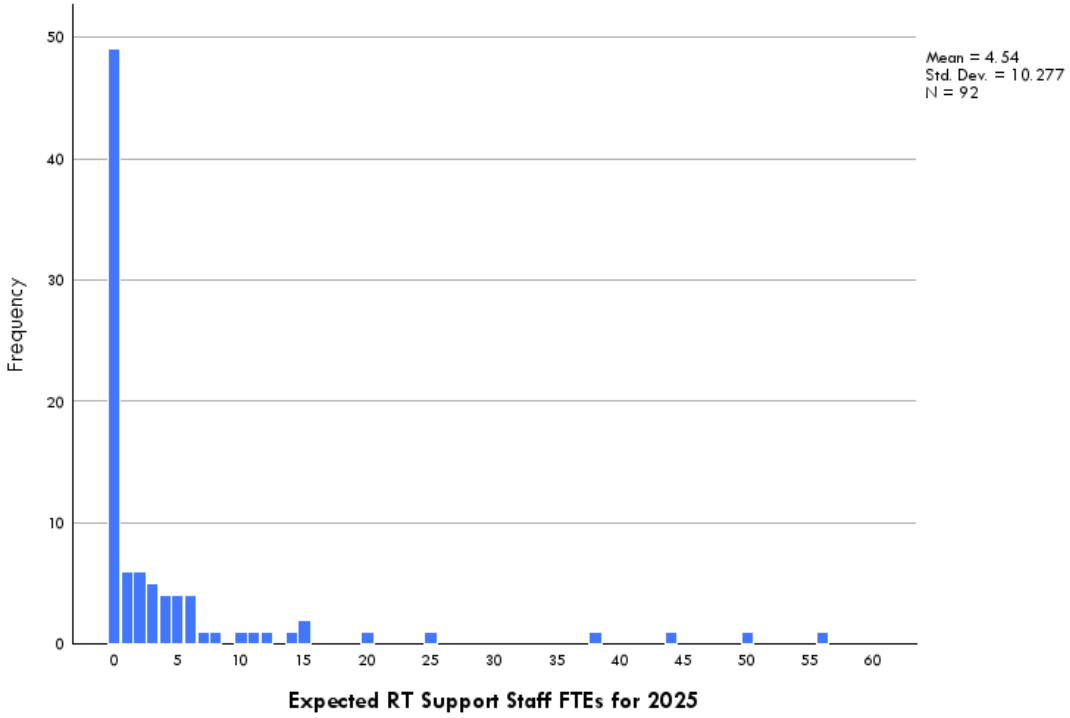


Figure 37. Expected RT Support Staff FTEs in 2025

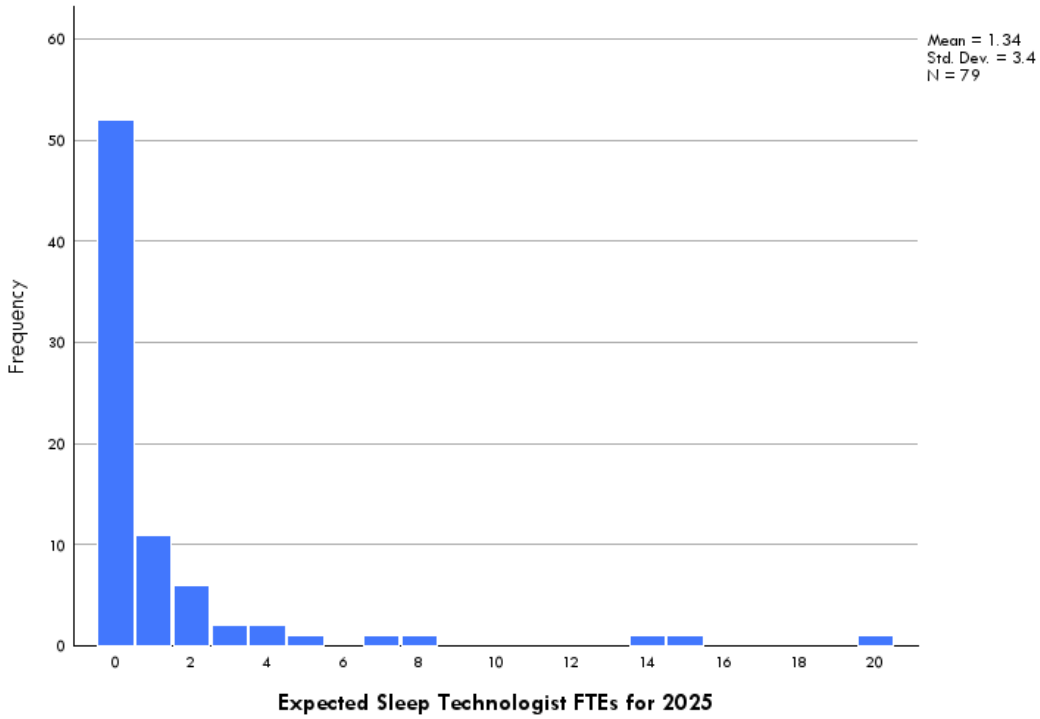


Figure 38. Expected Sleep Technologist FTEs in 2025

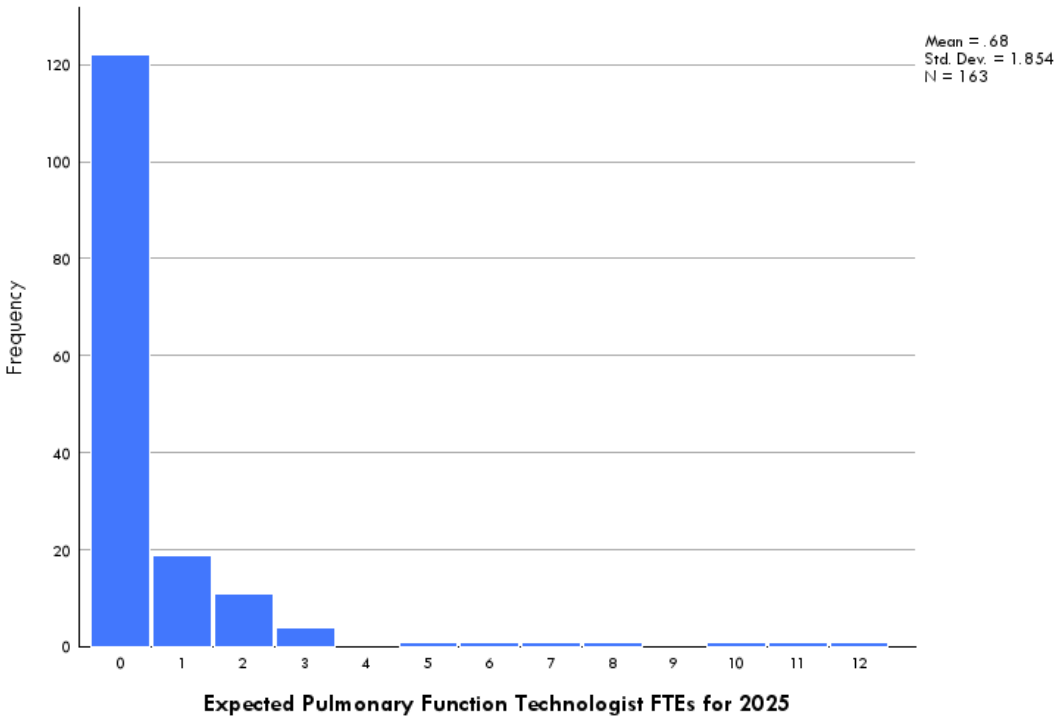


Figure 39. Expected Pulmonary Function Technologist FTEs in 2025

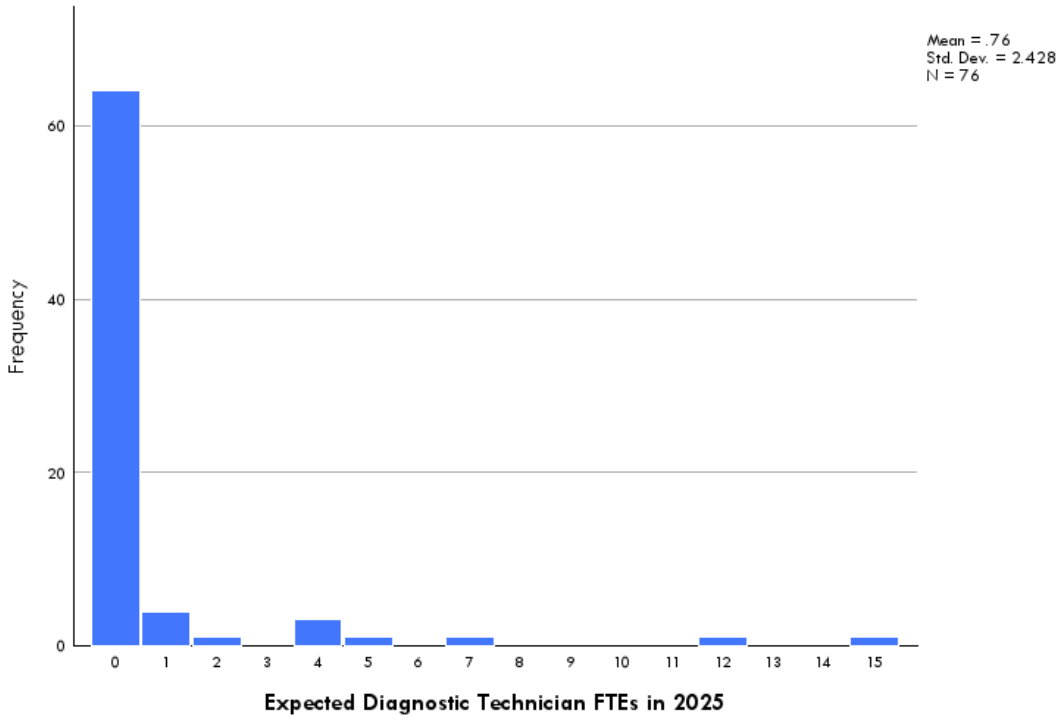


Figure 40. Expected Diagnostic Technician FTEs in 2021

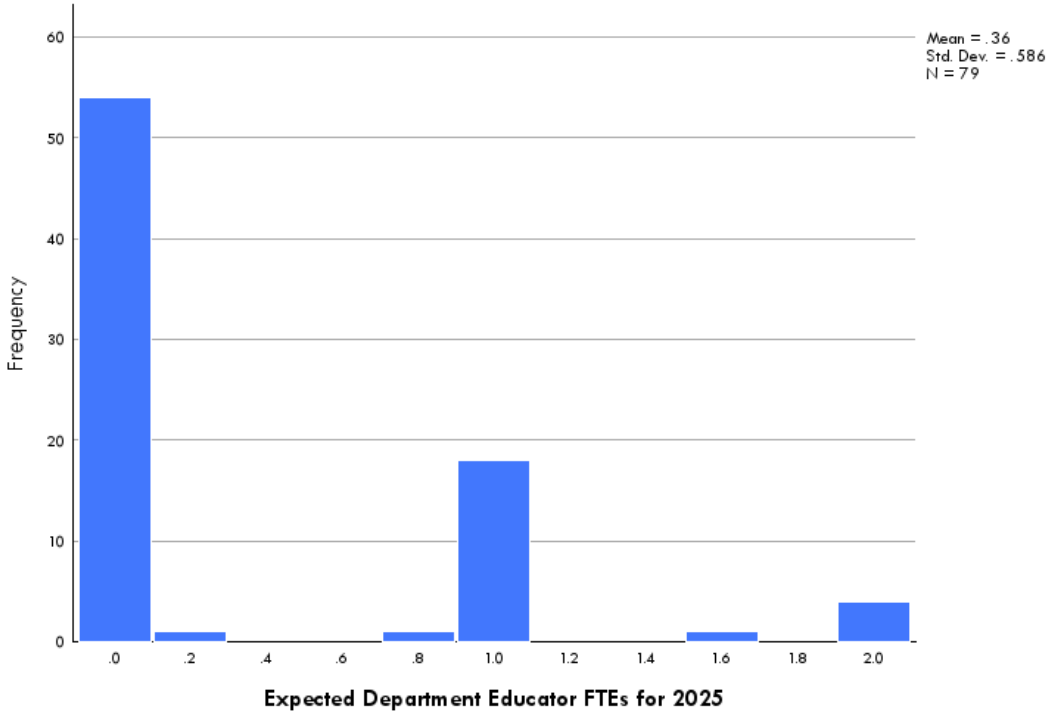


Figure 41. Expected Department Educator FTEs in 2021

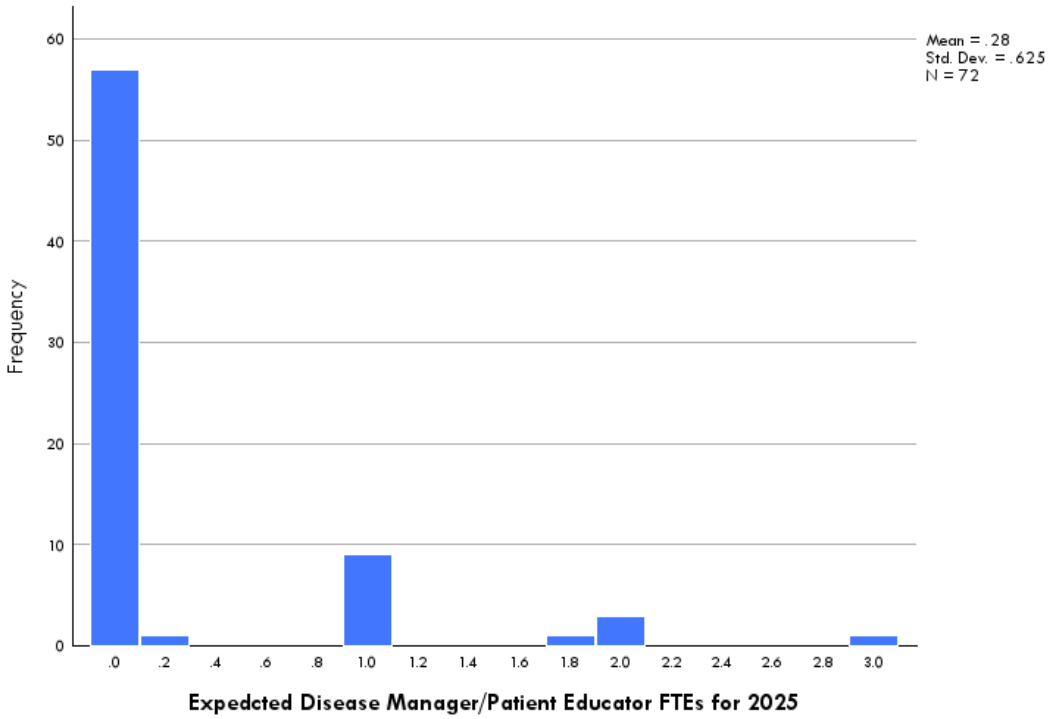


Figure 42. Expected Disease Manager/Patient Educator FTEs in 2021

Last Fiscal Year

17. How many respiratory therapists (number of therapists – not FTEs) were employed on the last day of the last fiscal year?

Both Table 14 and Table 15 indicated that a typical technical director had reported employing at least some respiratory therapists in part time positions. Depending on how one interpreted missing responses a typical department had between 22 and 35 therapists who were employed.

Table 14. First estimates of full and part time therapists employed on the last day of the last fiscal year

	N							
	Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
Full Time therapists employed on the last day of the last fiscal year	108	55	29.04	4.35	15.00	45.21	0	300
Part Time therapists employed on the last day of the last fiscal year	94	69	5.74	1.02	2.00	9.84	0	55

Table 15. Conservative estimates of full and part time therapists employed on the last day of the last fiscal year*

	N							
	Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
Full Time therapists employed on the last day of the last fiscal year	163	0	19.24	3.07	5.00	39.24	.0	300.0
Part Time therapists employed on the last day of the last fiscal year	163	0	3.31	.63	.00	7.98	.0	55.0

*Missing responses were converted to zero values under the expectation that at least some of these respondents skipped the question rather than enter a value of zero. Doing so produced a more conservative population estimate.

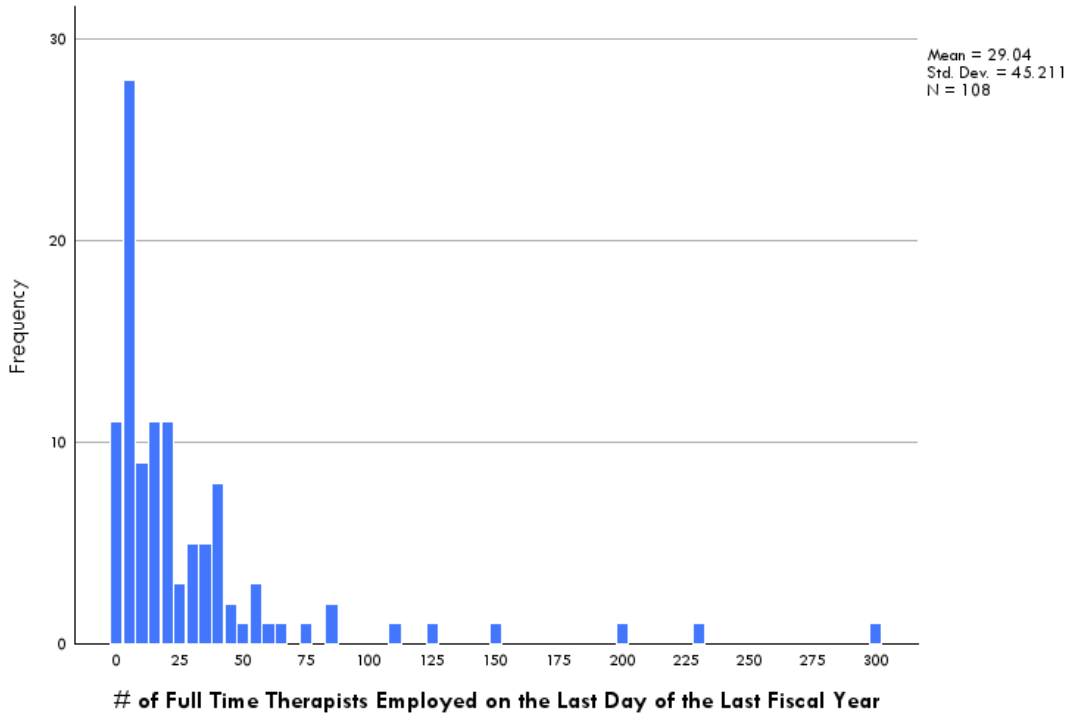


Figure 43. Full Time Therapists Employed on the Last Day of the Last Fiscal Year

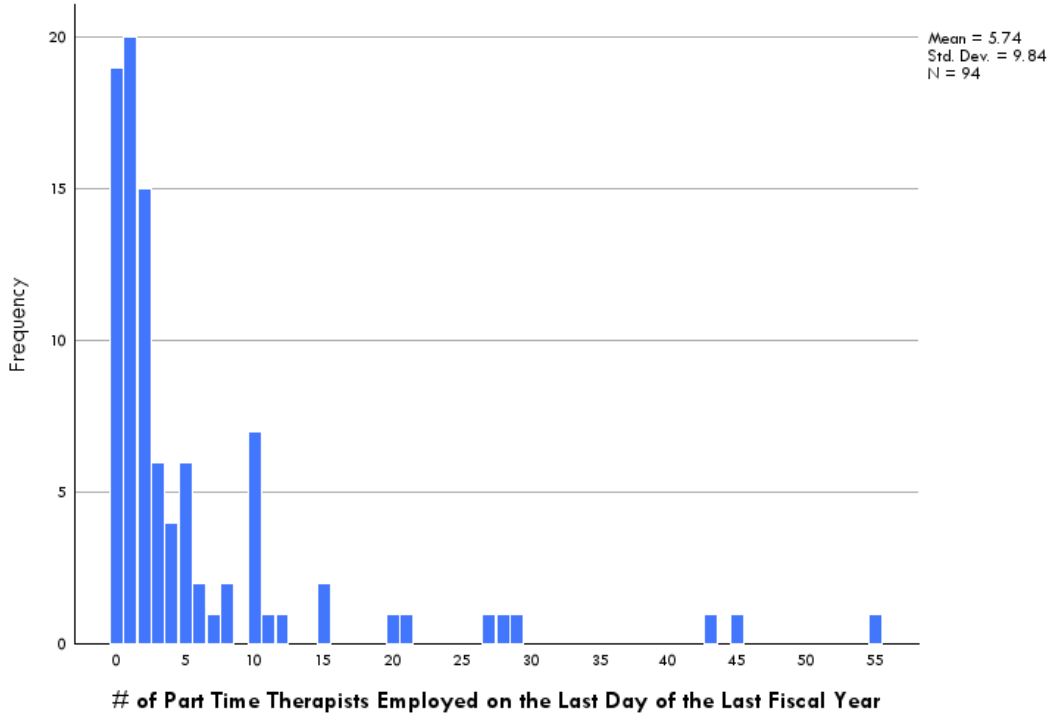


Figure 44. Part Time Therapists Employed on the Last Day of the Last Fiscal Year

18. How many respiratory therapists (number of therapists – not FTEs) vacated a job position during the last fiscal year?

According to mean results shown in Tables 16 and 17, the typical respondent indicated that three therapists working full time and one therapist working part time had vacated a job position over the last year.

Table 16. First Estimate of Therapists Who Vacated a Position During the Last Fiscal Year.

	N			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Full Time therapists that vacated a job position during the last fiscal year	108	55	3.26	.55	1.00	5.74	0	40
Part Time therapists that vacated a job position during the last fiscal year	88	75	1.31	.24	.00	2.30	0	13

Table 17. Conservative Estimate of Therapists Who Vacated a Position During the Last Fiscal Year*

	N			Std. Error		Std.		
	Valid	Missing	Mean	of Mean	Median	Deviation	Minimum	Maximum
Full Time therapists that vacated a job position during the last fiscal year	163	0	2.16	.38	.00	4.91	0	40
Part Time therapists that vacated a job position during the last fiscal year	163	0	.71	.14	.00	1.81	0	13

*Missing responses were converted to zero values under the expectation that at least some of these respondents skipped the question rather than enter a value of zero. Doing so produced a more conservative population estimate.

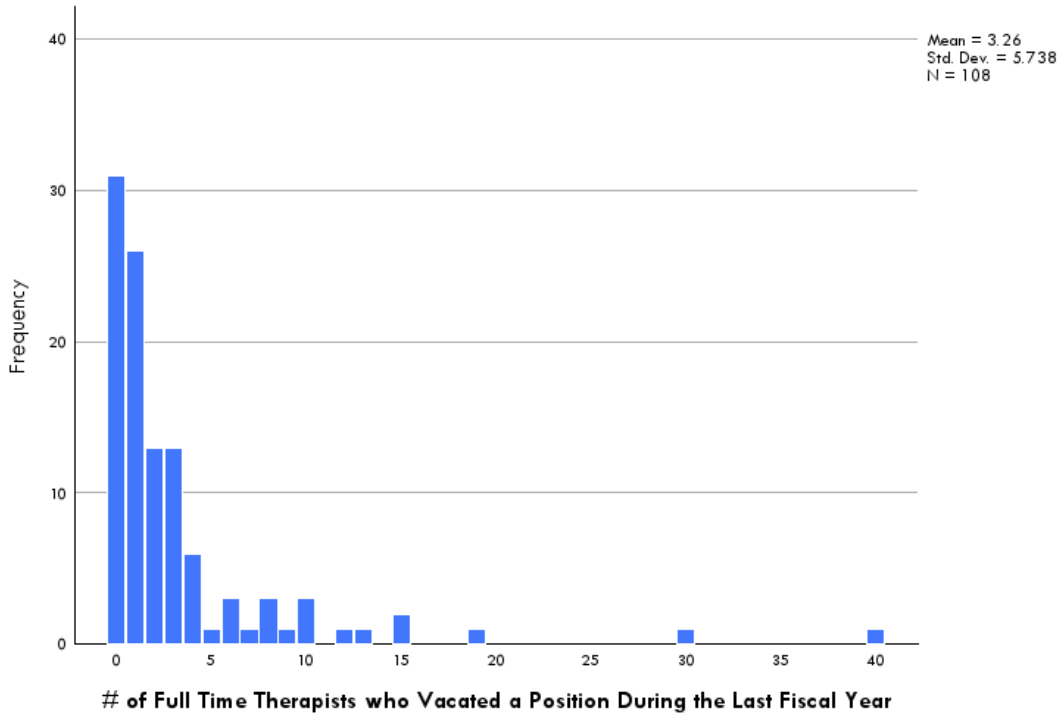


Figure 45. Full Time Therapists Who Vacated a Position During the Last Fiscal Year

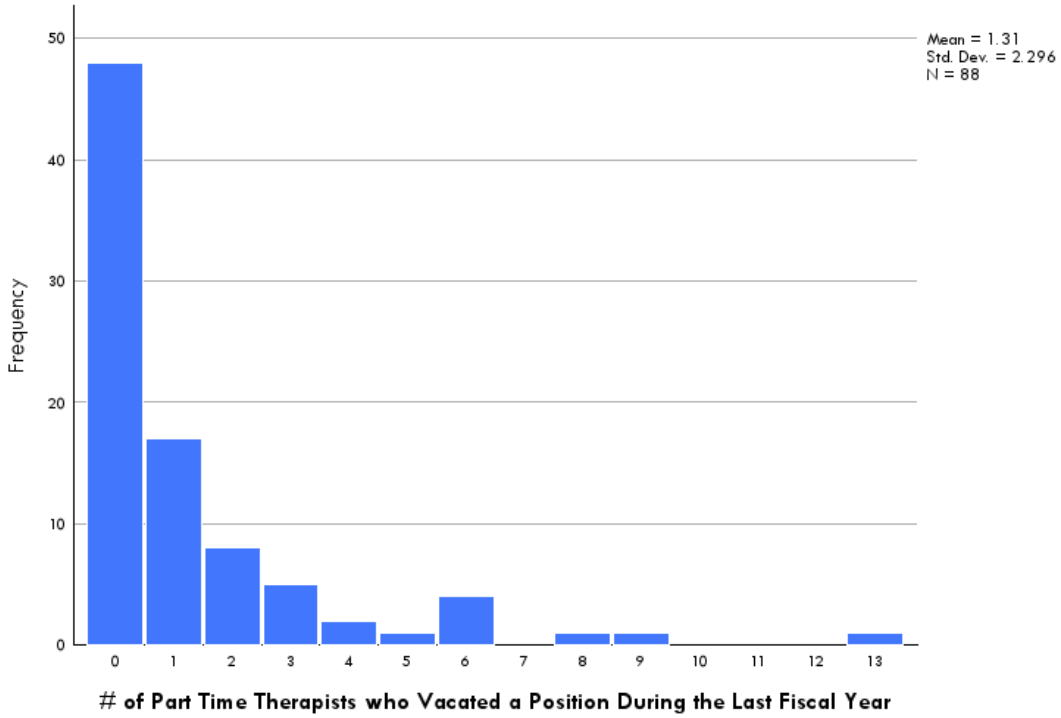


Figure 46. Part Time Therapists Who Vacated a Position During the Last Fiscal Year

Hourly Wage

19. What is the average hourly wage, including any differentials, for respiratory therapists employed by the organization in the following job titles?

Statistical modeling to study and predict current total compensation is described in the report about responses from individual therapists. Those other results were informed by thousands of responses, which renders them more generalizable than would have been available in this phase of the study. However, one can still glean potentially useful benchmarking information from Table 18.

Table 18. Hourly Wage by Position Sorted in Descending Mean Order*

	N			Std. Error of	Std.		
	Valid	Missing	Mean	Mean	Deviation	Minimum	Maximum
Director/Manager	89	74	52.65	1.54	14.56	28.00	102.95
Department Educator	22	141	46.00	1.86	8.71	28.00	59.90
Supervisor	58	105	44.28	1.25	9.52	26.00	76.50
Disease Mgr/Pt Educator	12	151	39.78	1.25	4.33	34.00	47.57
RT Support Staff	27	136	39.06	2.01	10.43	26.00	65.90
Pulmonary Function Technologist	42	121	39.40	1.26	8.19	26.00	63.00
Staff Therapist	89	74	36.13	.67	6.29	26.00	57.00
Sleep Technologist	27	136	33.69	1.24	6.46	27.00	56.50
Other Diagnostic Technologist	14	149	33.37	2.47	9.24	18.00	45.00

*Excluded cases of $0

We compared the average hourly wage within each position listed in Table 19 for differences by CMS designation as a critical access hospital. All positions in hospitals that were designated as critical access were paid less than those that who worked at hospitals that did not hold that designation.

Table 19. Mean hourly wage ($) by position by CMS Critical Access Hospital designation

	Is this hospital designated as a Critical Access Hospital by CMS?							
	Yes				No			
	N	Mean	Std. Deviation	Std. Error Mean	N	Mean	Std. Deviation	Std. Error Mean
Therapist	32	34.56	5.94	1.05	57	**37.01**	6.36	.84
Director/Manager	33	46.24	11.20	1.95	56	**56.43**	15.06	2.01
Supervisor	15	38.47	6.30	1.63	43	**46.31**	9.67	1.47
RT Support Staff	6	29.92	5.99	2.44	21	**41.67**	10.01	2.19
Sleep Tech	15	32.74	4.49	1.16	12	**34.88**	8.39	2.42
PFT	10	35.27	8.21	2.60	32	**40.69**	7.87	1.39
Other Tech	6	31.65	8.97	3.66	8	**34.65**	9.84	3.48
Department Educator	3	43.00	14.11	8.14	19	**46.47**	8.05	1.85
Disease Mgr/Pt Educator	1	36.00	.	.	11	**40.12**	4.37	1.32

The highest wages by region occurred in the Northeast (Supervisor, Sleep Technologist, Other Diagnostic Technologist) and the West (Therapist, Director/Manager, RT Support Staff, Pulmonary Function Technologist).

Table 20. Mean hourly wage ($) by position by Region

Region		N		Mean	Std. Error of Mean	Std. Deviation
		Valid	Missing			
Northeast	Therapist	13	11	37.83	2.02	7.29
	Director/Manager	14	10	57.40	4.53	16.93
	Supervisor	10	14	**50.21**	4.12	13.02
	RT Support Staff	6	18	40.64	4.15	10.17
	Sleep Tech	2	22	**43.25**	13.25	18.74
	PFT	8	16	43.89	3.54	10.01
	Other Tech	2	22	**42.60**	1.38	1.96
	Department Educator	2	22	48.00	.00	.00
	Disease Mgr/Pt Educator	1	23	**43.33**		
South	Therapist	28	25	35.69	1.26	6.64
	Director/Manager	29	24	51.42	2.41	12.96
	Supervisor	20	33	42.93	1.67	7.46
	RT Support Staff	10	43	38.64	3.64	11.52

Region		N		Mean	Std. Error of Mean	Std. Deviation
		Valid	Missing			
	Sleep Tech	6	47	32.33	2.55	6.25
	PFT	12	41	38.42	1.56	5.41
	Other Tech	4	49	25.25	3.90	7.80
	Department Educator	11	42	47.54	2.97	9.86
	Disease Mgr/Pt Educator	3	50	42.29	1.19	2.06
Midwest	Therapist	36	31	34.97	.79	4.72
	Director/Manager	35	32	50.03	2.03	12.03
	Supervisor	21	46	43.03	1.56	7.15
	RT Support Staff	8	59	36.87	2.38	6.74
	Sleep Tech	16	51	32.39	1.02	4.06
	PFT	17	50	36.60	1.40	5.78
	Other Tech	5	62	34.00	3.58	8.00
	Department Educator	8	59	41.76	2.22	6.28
	Disease Mgr/Pt Educator	8	59	38.39	1.64	4.65
West	Therapist	12	7	**38.80**	2.30	7.96
	Director/Manager	11	8	**58.18**	6.29	20.87
	Supervisor	7	12	43.43	5.20	13.76
	RT Support Staff	3	16	**43.11**	10.77	18.66
	Sleep Tech	3	16	37.00	2.52	4.36
	PFT	5	14	**44.06**	6.23	13.93
	Other Tech	3	16	36.97	5.68	9.84
	Department Educator	1	18	**59.00**		
	Disease Mgr/Pt Educator	0	19			

The urban vs. rural geographic designation summarized in Table 21 showed differences in the average hourly wages paid. Facilities in urban environments paid more to those in Therapist, Director/Manager, Supervisor, RT Support Staff, Pulmonary Function Technologist, and Department Educator positions. Rural hospitals paid more to individuals working as Sleep Technologists, Other Diagnostic Technologists, and Disease Managers/Patient Educators.

Table 21. Mean hourly wage ($) by position by urban/rural location

	Urban/Rural							
	Rural				Urban			
	N	Mean	Std. Deviation	Std. Error Mean	N	Mean	Std. Deviation	Std. Error Mean
Therapist	66	35.27	6.37	.78	23	**38.60**	5.44	1.13
Director/Manager	66	49.74	13.62	1.68	23	**60.98**	14.21	2.96
Supervisor	37	42.85	10.09	1.66	21	**46.80**	8.05	1.76
RT Support Staff	16	36.21	10.90	2.73	11	**43.19**	8.53	2.57
Sleep Tech	21	**34.22**	6.88	1.50	6	31.84	4.73	1.93
PFT	25	38.23	8.38	1.68	17	**41.12**	7.81	1.90
Other Tech	10	**35.01**	8.90	2.82	4	29.25	10.05	5.02
Department Educator	13	45.46	8.66	2.40	9	**46.78**	9.26	3.09
Disease Mgr/Pt Educator	5	**40.04**	4.67	2.09	7	39.59	4.45	1.68

We asked whether the administrative officer had a clinical background. Additional details can be found on Page 57. Table 22 compared means for hourly wages by job positions and whether the administrative officer had a clinical background. All positions except Department Educator and Disease Manager/Patient Educator saw increased wages in facilities where the administrative officer had a clinical background.

Table 22. Mean hourly wage ($) by position by administrative officer with clinical background

	Assuming you are the Director / Manager of respiratory care services, does the administrative officer to whom you report have a clinical background?							
	Yes				No			
	N	Mean	Std. Deviation	Std. Error Mean	N	Mean	Std. Deviation	Std. Error Mean
Therapist	66	**36.91**	6.60	.81	22	34.25	4.52	.96
Director/Manager	67	**54.57**	15.47	1.89	21	47.61	8.81	1.92
Supervisor	40	**46.43**	9.54	1.51	17	40.30	7.21	1.75
RT Support Staff	21	**41.19**	10.41	2.27	5	32.70	7.00	3.13
Sleep Tech	18	**34.78**	7.30	1.72	9	31.51	3.81	1.27
PFT	29	**40.72**	8.62	1.60	12	37.31	5.91	1.71
Other Tech	9	**38.12**	7.14	2.38	4	24.50	6.61	3.30
Department Educator	19	45.95	8.99	2.06	3	**46.33**	8.39	4.84
Disease Mgr/Pt Educator	9	39.31	4.02	1.34	3	**41.19**	5.88	3.39

We also asked about the number of staffed beds in the facility. We created three bed-size groups (Less than 50, 50 to 200, More than 200) to compare mean hourly wages as shown in Table 23. The largest facilities paid the highest wage for each position except for "Other Diagnostic Technologists."

Table 23. Mean hourly wage ($) position by bed size

Bed subgroups		N		Mean	Std. Error of Mean	Std. Deviation
		Valid	Missing			
Less than 50	Therapist	32	4	34.27	.73	4.14
	Director/Manager	32	4	44.49	1.36	7.72
	Supervisor	10	26	39.20	1.37	4.35
	RT Support Staff	3	33	34.33	6.33	10.97
	Sleep Tech	12	24	32.93	1.30	4.51
	PFT	8	28	38.21	2.49	7.05
	Other Tech	3	33	33.31	3.50	6.07
	Department Educator	2	34	42.00	14.00	19.80
	Disease Mgr/Pt Educator	1	35	36.00		

50 to 200	Therapist	20	2	34.95	1.54	6.87
	Director/Manager	20	2	51.58	2.85	12.73
	Supervisor	12	10	41.21	2.58	8.93
	RT Support Staff	6	16	35.90	3.47	8.50
	Sleep Tech	7	15	30.86	1.12	2.97
	PFT	12	10	38.69	2.47	8.55
	Other Tech	5	17	**35.24**	4.55	10.16
	Department Educator	4	18	38.94	3.68	7.36
	Disease Mgr/Pt Educator	4	18	38.27	3.21	6.42
More than 200	Therapist	36	3	**38.72**	1.12	6.69
	Director/Manager	36	3	**61.12**	2.59	15.56
	Supervisor	35	4	**47.31**	1.61	9.54
	RT Support Staff	17	22	**41.77**	2.58	10.62
	Sleep Tech	8	31	**37.32**	3.38	9.57
	PFT	21	18	**40.89**	1.80	8.23
	Other Tech	5	34	33.00	5.25	11.74
	Department Educator	16	23	**48.27**	1.74	6.96
	Disease Mgr/Pt Educator	7	32	**41.18**	1.04	2.76

20. What is the average hourly pay rate, including differentials, for respiratory therapists who are new graduates of the following degree programs?

Typical new graduates of Masters degree programs who were described in Table 24 earned the same as those from Baccalaureate degree programs, who earned more than graduates from Associate degree programs. Mean and median values shown in Table 24 can be considered typical wages on entry into the profession.

Table 24. Mean hourly wage by degree program

	N							
	Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
Associate	84	79	29.55	.61	29.00	5.62	19.00	50.87
Baccalaureate	79	84	30.43	.67	30.00	5.94	19.00	51.38
Masters	61	102	30.45	.77	30.00	6.05	19.00	51.83

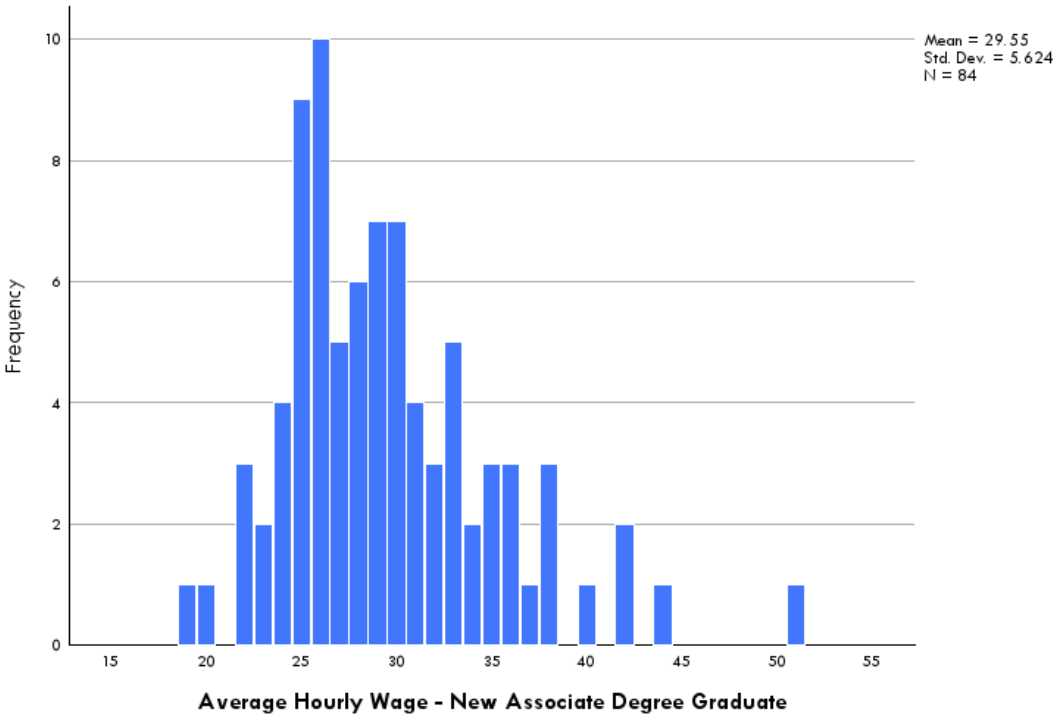


Figure 47. Mean hourly wage ($) for New Graduates of Associate Degree Programs

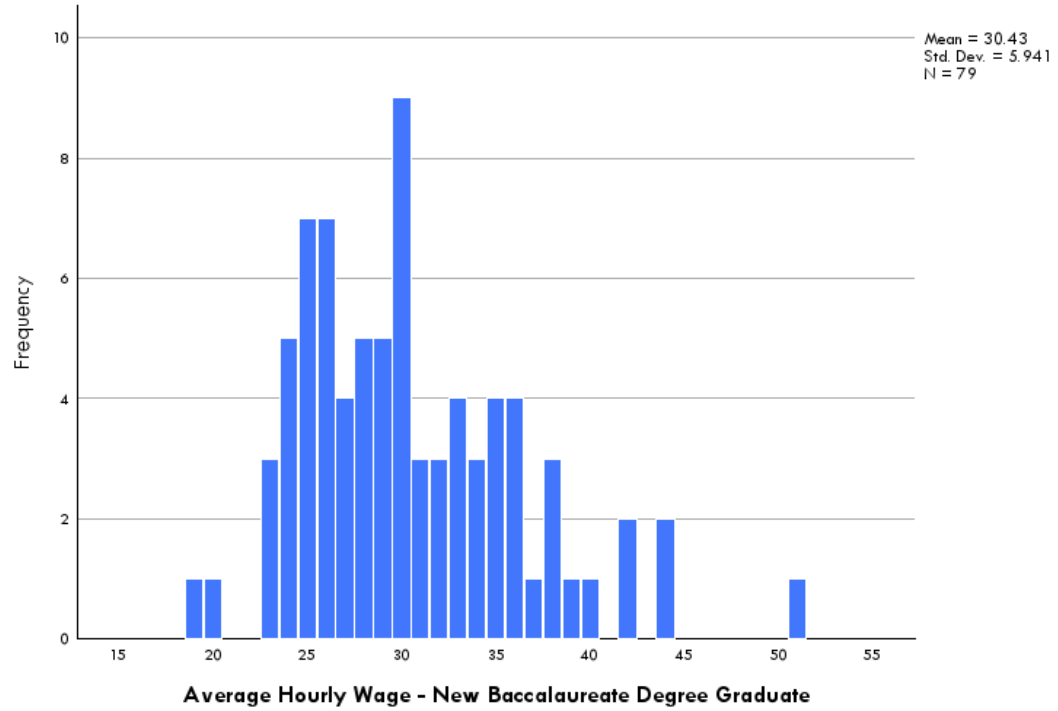


Figure 48. Mean hourly wage ($) for New Graduates of Baccalaureate Degree Programs

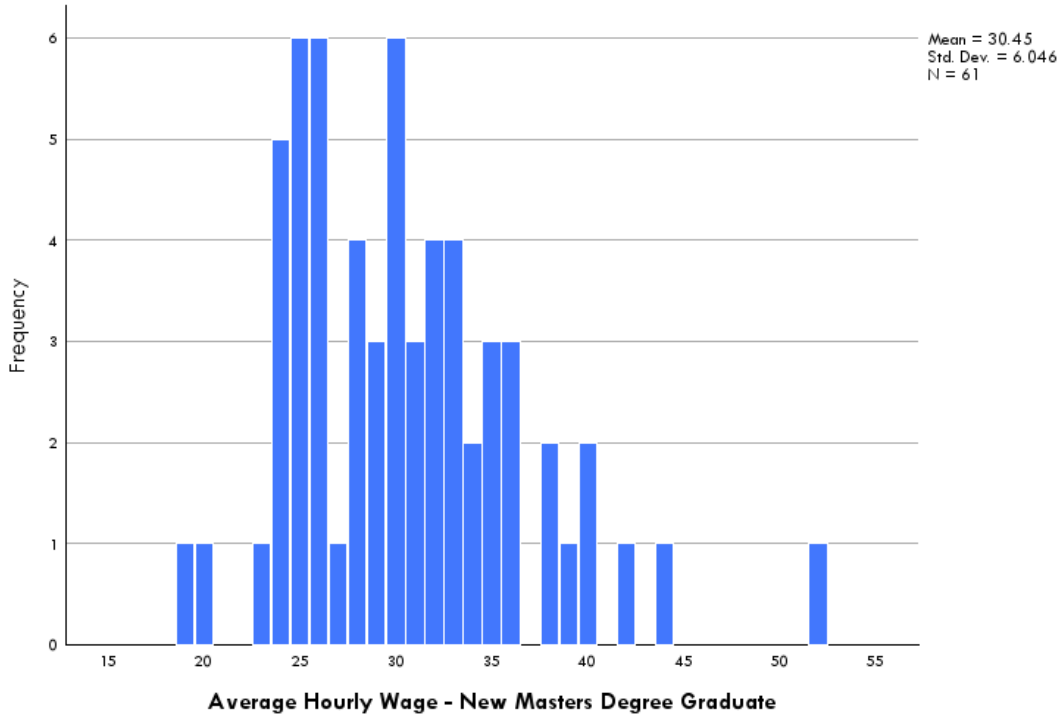


Figure 49. Mean hourly wage ($) for New Graduates of Masters Degree Programs

21. Indicate the number of respiratory therapist FTEs who separated employment from your organization in the last fiscal year for the reasons listed below.

The same potential issues with missing responses are present in this set of responses as were discussed earlier in this report. If one assumes that technical directors had incidences of employment separation that they chose not to report, then the population projections in Table 25 are more likely. If one assumes that technical directors who skipped this question were more likely to have had zero incidences of employment separation, then the lower projections in Table 26 are more likely.

Table 25. First Estimates for the Number of FTEs who Separated Employment

	N			Std. Error of		Std.		
	Valid	Missing	Mean	Mean	Median	Deviation	Minimum	Maximum
Retirement	75	88	.89	.186	.00	1.608	0.0	10.0
Voluntary Separation	90	73	2.86	.502	1.00	4.762	0.0	31.9
Inadequate Performance	71	92	.61	.133	.00	1.124	0.0	6.0
Workforce Reduction	63	100	.02	.016	.00	.128	0.0	1.0

Table 26. Conservative Estimates for the Number of FTEs who Separated Employment*

	N		Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
	Valid	Missing						
Retirement	163	0	.41	.09	.00	1.17	0	10.0
Voluntary Separation	163	0	1.58	.30	.00	3.81	0	31.9
Inadequate Performance	163	0	.27	.06	.00	.80	0	6.0
Workforce Reduction	163	0	.01	.01	.00	.08	0	1.0

*Missing responses were converted to zero values under the expectation that at least some of these respondents skipped the question rather than enter a value of zero. Doing so produced a more conservative population estimate.

Most hospitals did not have a respiratory therapist retire in 2023. Of the hospitals that did and were described in Figure 50, retirements were typically limited to 1 or 2 FTEs per hospital.

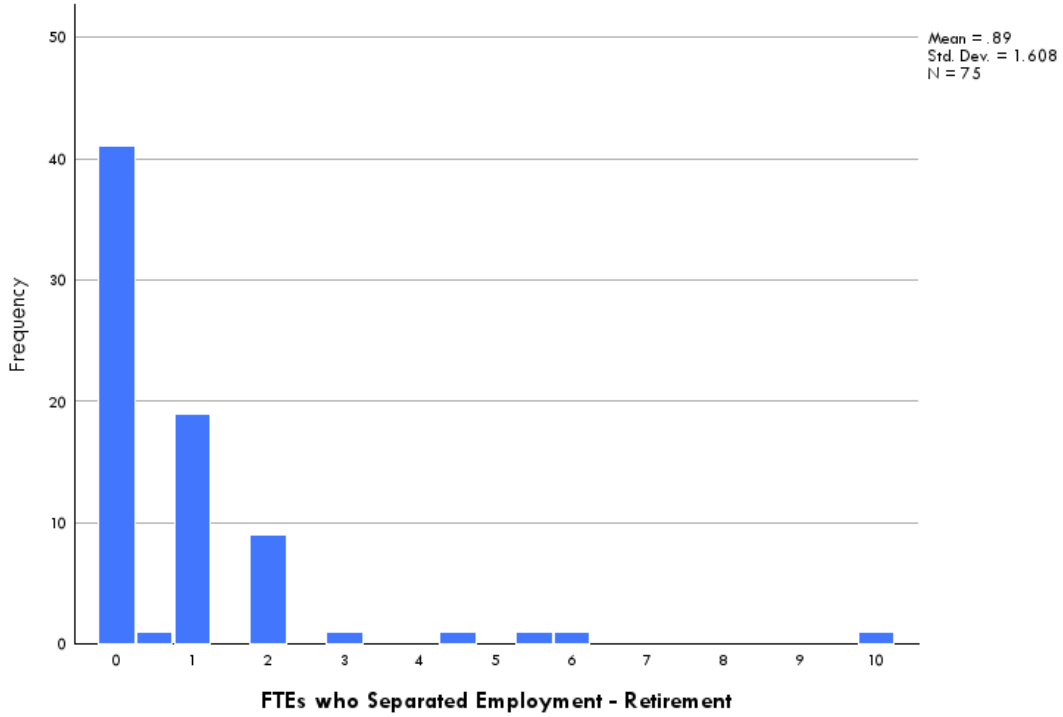


Figure 50. FTEs who Separated Employment Due to Retirement

When hospitals had respiratory therapists voluntarily separate from employment, three or fewer FTEs were typically involved. A median value of 1 indicated that the typical hospital had one FTE separate from employment voluntarily during the last fiscal year.

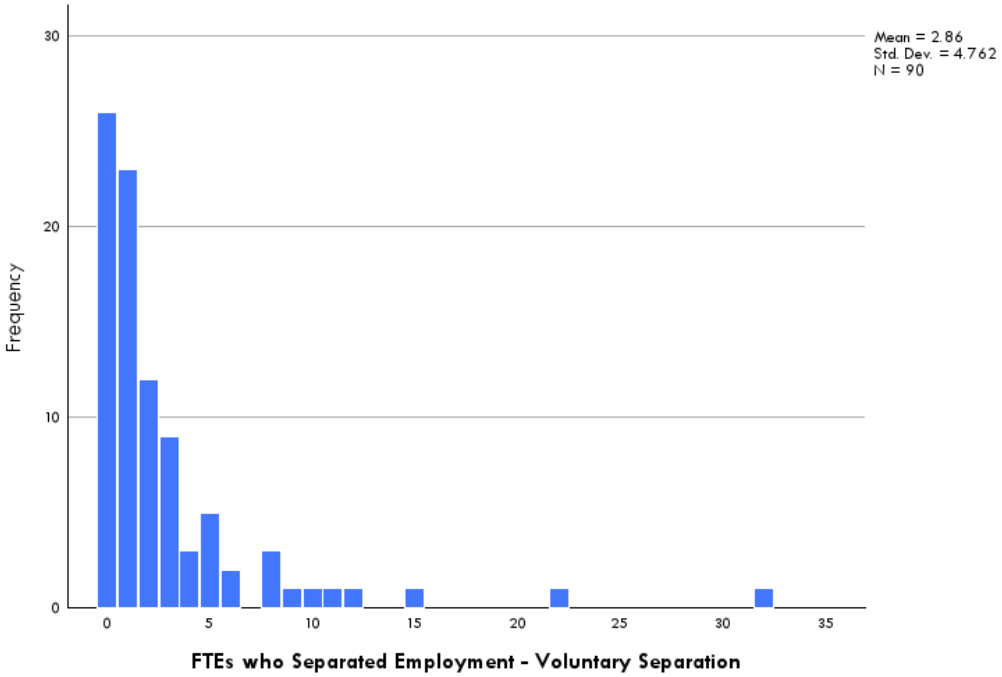


Figure 51. FTEs who Separated Employment Due to Voluntary Separation

Because the median value was zero, most hospitals did not experience a separation from employment due to inadequate performance. Of those hospitals that did, typically no more than 2 FTEs were involved as Figure 52 showed.

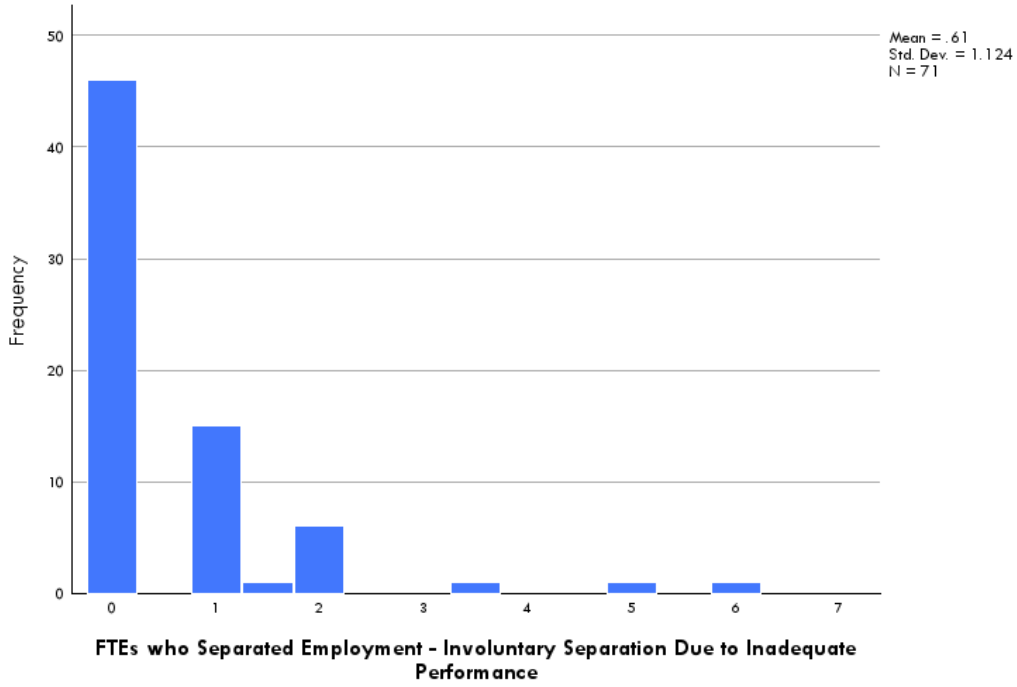


Figure 52. FTEs who Separated Employment Due to Inadequate Performance

Again, a median value of zero indicated that most hospitals did not experience a workforce reduction among respiratory therapists. Workforce reductions could take other forms. For example, if a therapist chooses to retire and the FTE goes unfilled or is closed, then the impact would be the same on the personnel who would remain.

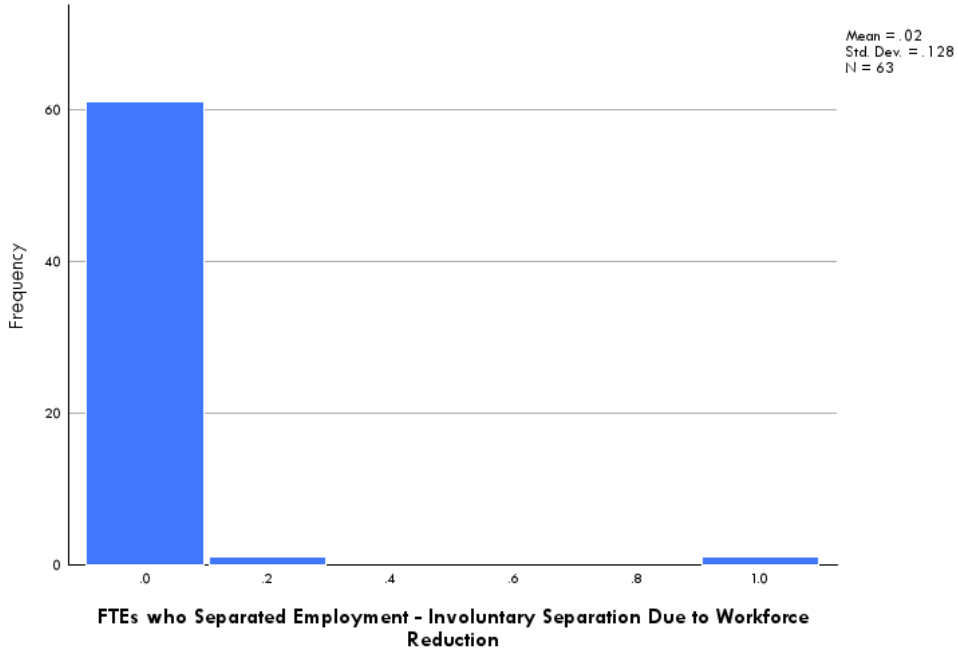


Figure 53. FTEs who Separated Employment Due to Workforce Reduction

22. In the last fiscal year, approximately what percentage of hours worked by respiratory therapists was paid as overtime?

Respondents were provided with options describing five-point ranges that started at '0-4%' and continued through '75% or more'. Approximately two thirds of respondents indicated that 15% or less of the hours worked by therapists was paid as overtime. Frequencies can be found in Appendix C, Table 49.

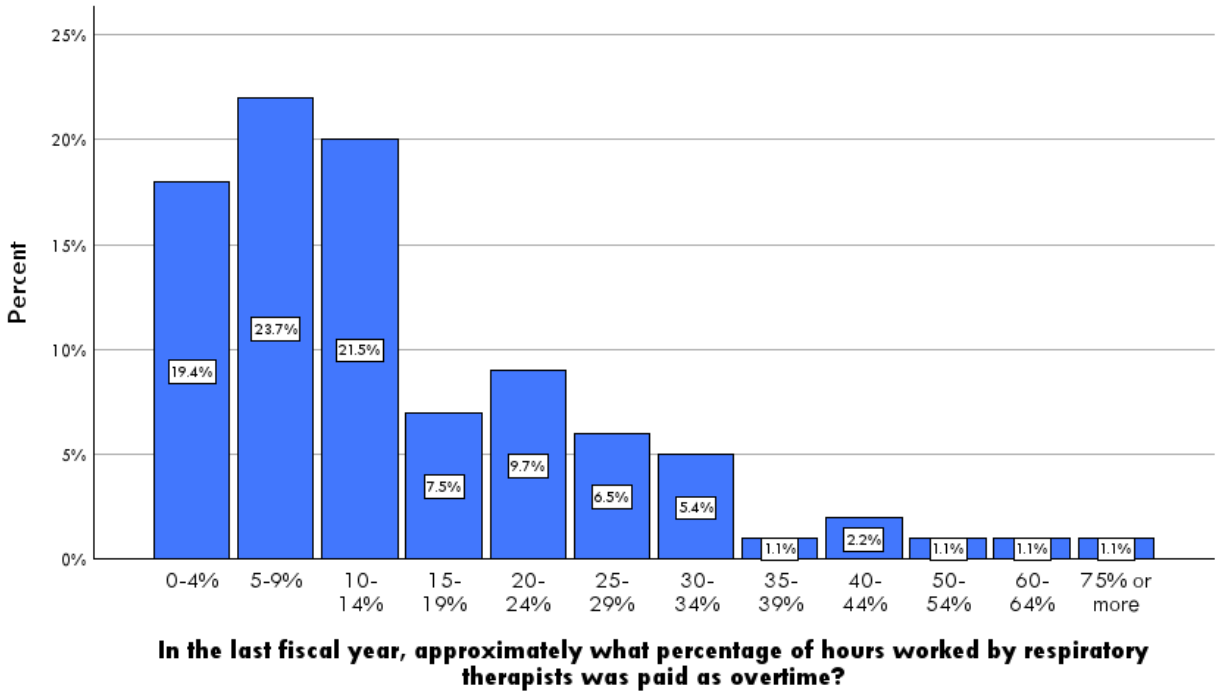


Figure 54. Percentage of hours worked as overtime

23. Is your department required to benchmark selected productivity or quality metrics against departments of comparable hospitals?

The valid percent of "Yes" responses was 57.7. However, there were many missing responses so the percentage could have been as low as 34.4. Frequencies can be found in Appendix C, Table 50.

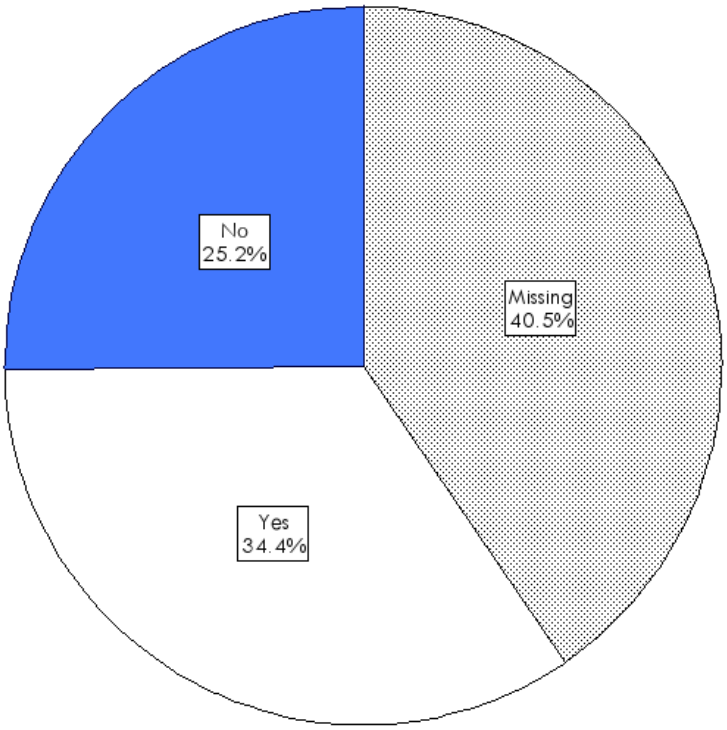


Figure 55. Distribution of benchmark use

24. How many hours does it typically take to orient a new respiratory therapist in your organization?

There was a large range of responses to this question reported in Table 27. After evaluating the median and mean values, the typical orientation period was 5 to 6 weeks long while assuming a 40-hour workweek. Frequencies can be found in Appendix C, Table 51.

Table 27. Number of hours spent orienting new employees

N							
Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
93	70	215.94	15.33	200.00	147.88	5	900

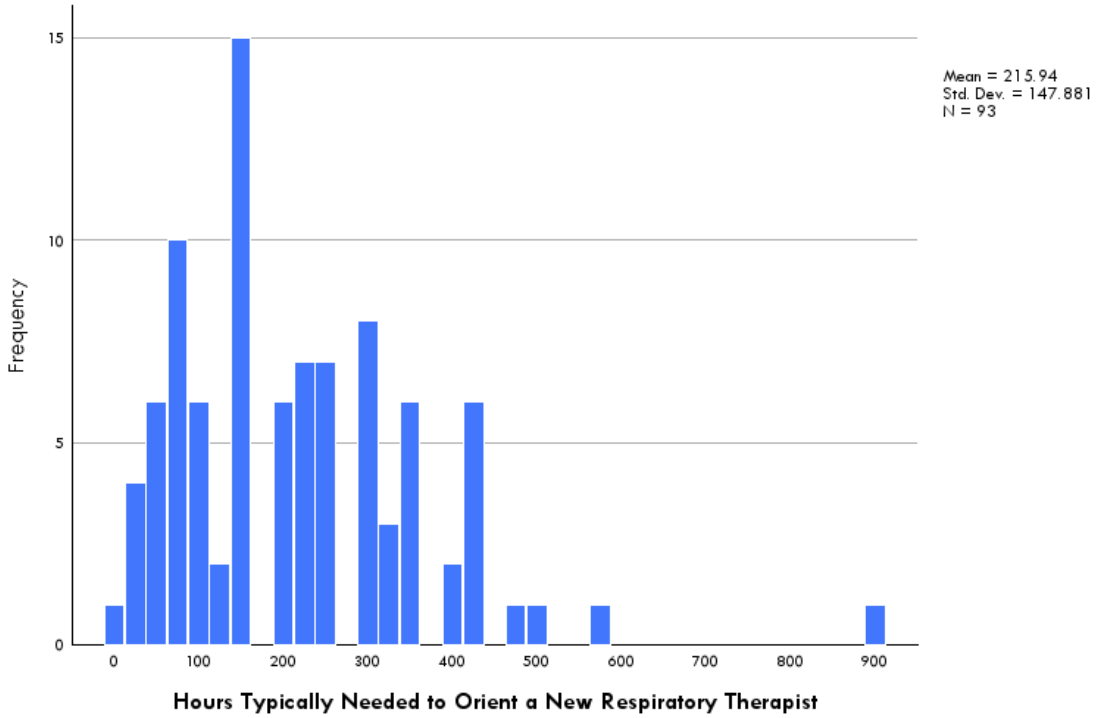


Figure 56. Hours spent orienting new employees

25. Does your department routinely measure the productivity of respiratory therapists?

The valid percent of "Yes" responses was 79.4. However, there were many missing responses so the percentage could have been as low as 47.2. Frequencies can be found in Appendix C, Table 52.

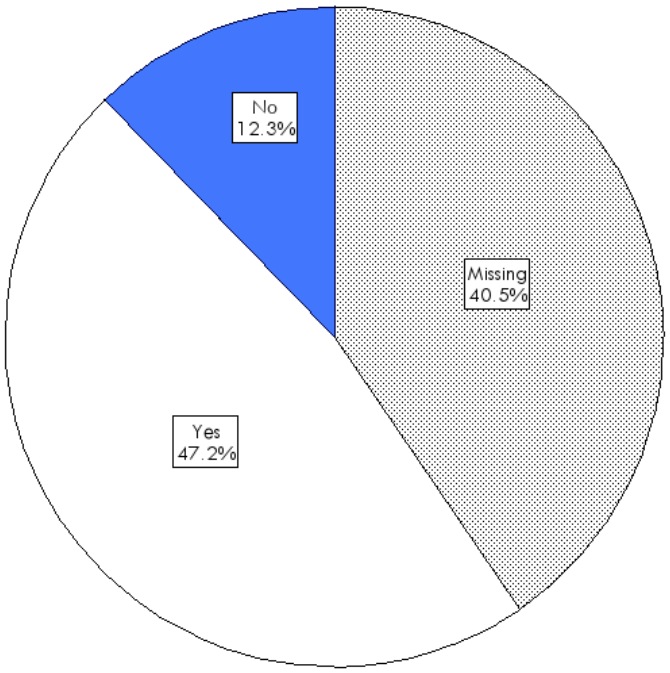


Figure 57. Distribution of department productivity measures

26. Which of the following is used to measure productivity in your institution?

Of those who routinely measure productivity, most (67.5%) of respondents used charges and procedures (66.5%). Respondents were directed to select all that applied. "Other" methods described by respondents can be found in Appendix D.

Table 28. Methods for measuring productivity

		Responses		Percent of Cases
		N	Percent	
	Relavtive value units (RVUs)	34	21.0%	44.2%
	Charges	52	32.1%	67.5%
	Procedures	51	31.5%	66.2%
	Patient days	16	9.9%	20.8%
	Other measure	9	5.6%	11.7%
Total		162	100.0%	210.4%

27. Does your hospital benchmark department activities against the AARC Safe and Effective Staffing Guide?

The valid percent of "Yes" responses was 35.1. However, there were many missing responses so the percentage could have been as low as 16.6. Frequencies can be found in Appendix C, Table 53.

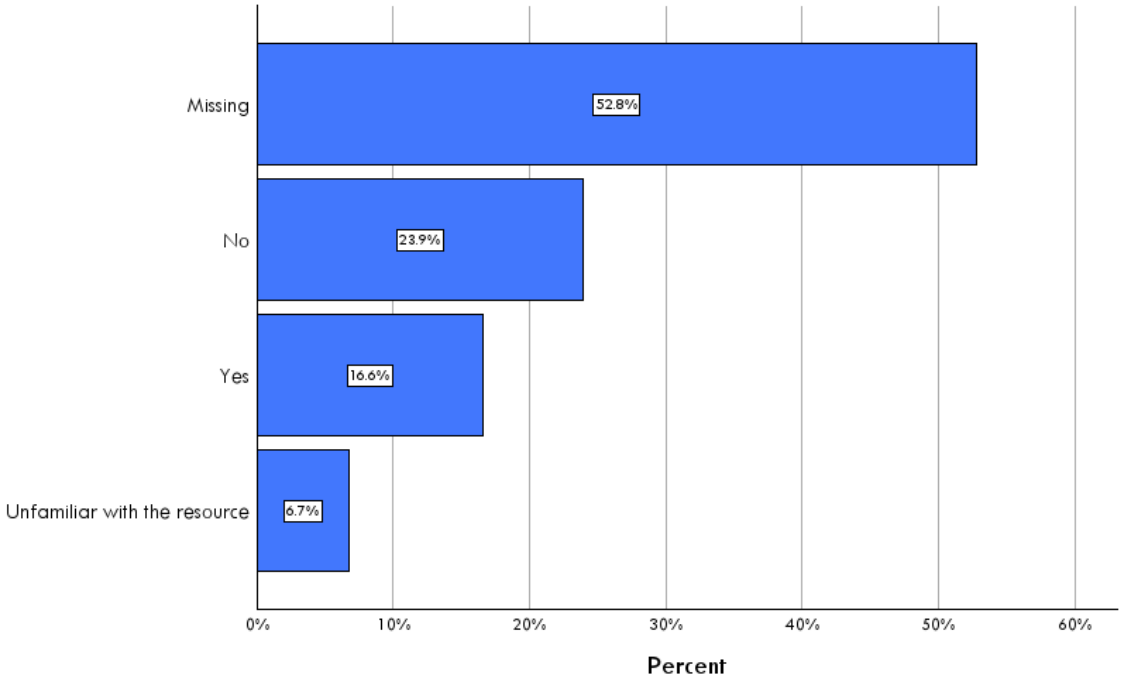


Figure 58. Benchmarking Against AARC Safe and Effective Staffing Guide

28. Does your organization use protocols to deliver respiratory care?

The valid percent of "Yes" responses was 78.4. However, there were many missing responses so the value could have been as low as 46.6. Frequencies can be found in Appendix C, Table 54.

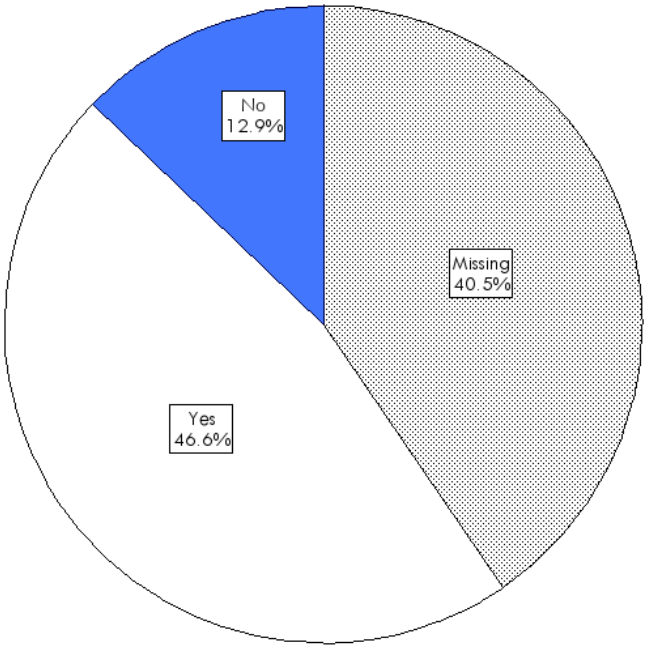


Figure 59. Use of protocols

29. Which of the following organization's guidelines do you follow when developing protocols?

A majority of respondents relied on guidelines suggested by AASM when developing protocols. Respondents could select all that applied. Other protocols can be found in Appendix D.

Table 29. Organizational guidelines followed for development of protocols

		Responses		Percent of Cases
		N	Percent	
	AARC	7	3.1%	7.4%
	AASM	85	37.8%	89.5%
	ATS	23	10.2%	24.2%
	CHEST	45	20.0%	47.4%
	ERS	28	12.4%	29.5%
	SCCM	10	4.4%	10.5%
	Not applicable	18	8.0%	18.9%
	Other protocol	9	4.0%	9.5%
Total		225	100.0%	236.8%

30. What types of protocols are used by respiratory therapists in your organization?

Large percentages of these acute care hospitals had protocols in place for oxygen therapy and bronchodilator therapy as Table 30 showed. Protocols for bronchial hygiene, spontaneous breathing trials, and mechanical ventilation were also prevalent as reported by a majority of respondents. Additional protocols are described in Appendix D. Respondents could select all that applied.

Table 30. Protocols used

	Responses		Percent of Cases
	N	Percent	
Bronchial hygiene	56	15.6%	73.7%
Bronchodilator therapy	62	17.3%	81.6%
Disease-based	33	9.2%	43.4%
Mechanical ventilation	54	15.1%	71.1%
Oxygen	64	17.9%	84.2%
Spontaneous Breathing Trial	55	15.4%	72.4%
VAP / VAE	29	8.1%	38.2%
Other protocols	5	1.4%	6.6%
Total	358	100.0%	471.1%

31. Does the organization's insurance provider test whether employees use nicotine?

A majority of respondents did not provide an answer to this question meaning that the true percentage of respondents working at a hospital testing for nicotine use fell between 11.0 and 23.7. Frequencies can be found in Appendix C, Table 55.

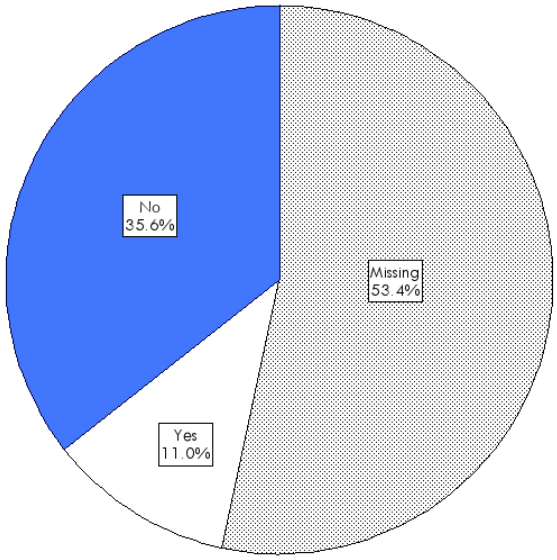


Figure 60. Hospital tests employees for nicotine use

32. Has cannabis been decriminalized in your state?

Most respondents lived in states where cannabis has been partially or completely decriminalized. A majority of respondents did not respond to this question so the percentage living in a state where cannabis has *not* been decriminalized could have been as low as 18.4 and as high as 40.0. Frequencies can be found in Appendix C, Table 56.

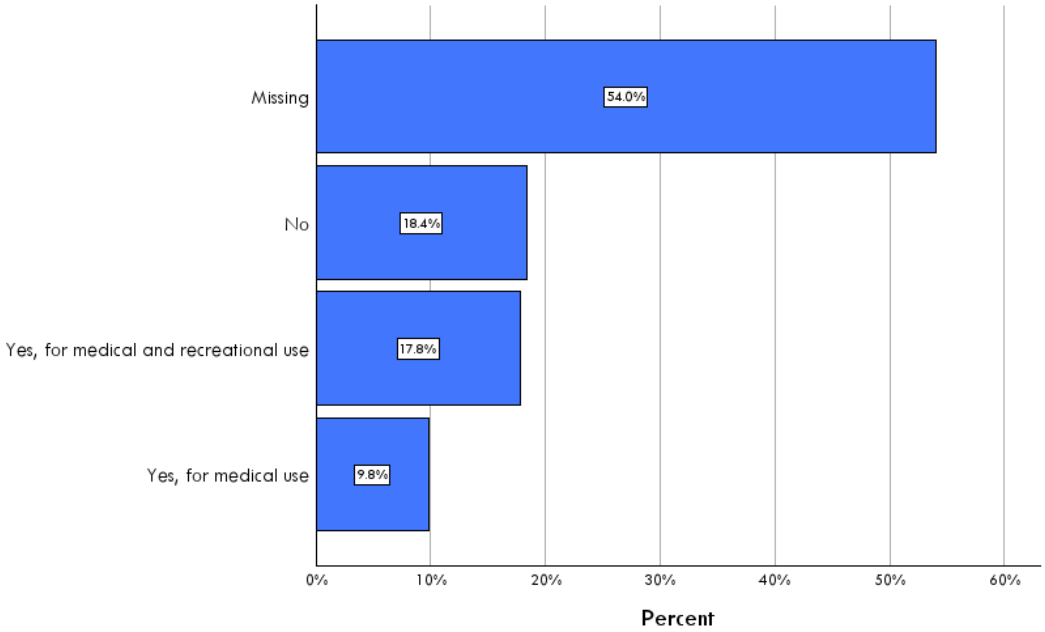


Figure 61. Decriminalization of cannabis

33. If your organization randomly tests employees for recreational substances, which of the following can affect employment?

Of those who responded, most did not know the type of random drug test that could affect employment. The next largest group worked for an organization that did not complete random testing. Frequencies can be found in Appendix C, Table *57*.

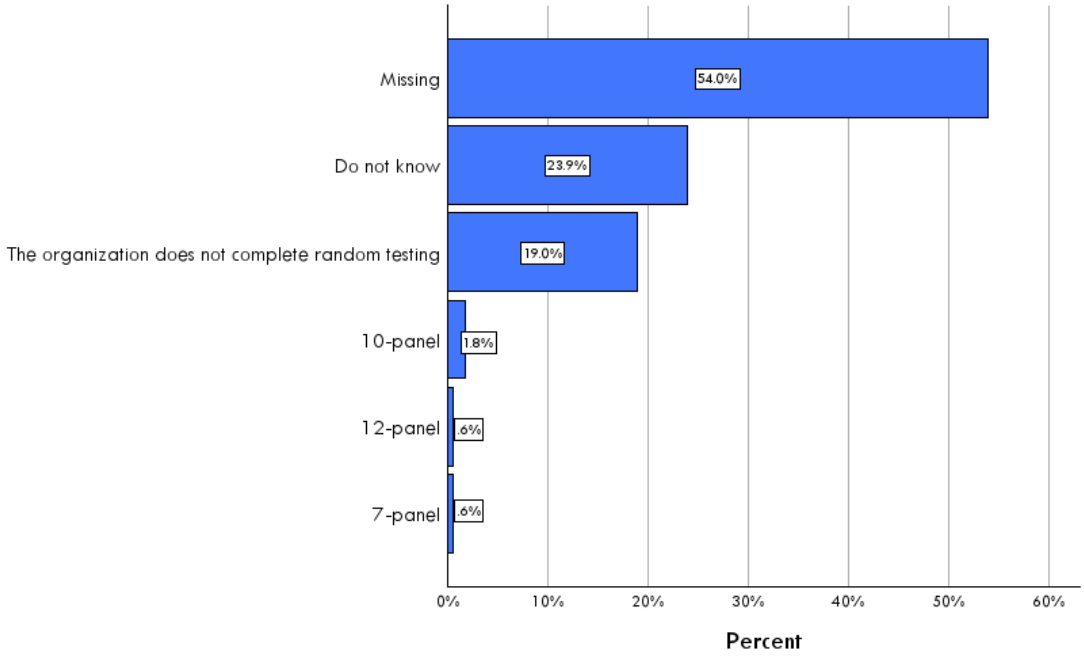


Figure 62. Random drug testing that can affect employment

34. Assuming you are the Director/Manager of respiratory care services, does the administrative officer to whom you report have a clinical background?

The valid percent of "Yes" responses was 74.2. However, there were many missing responses so the value could have been as low as 44.2. Frequencies can be found in Appendix C, Table 58.

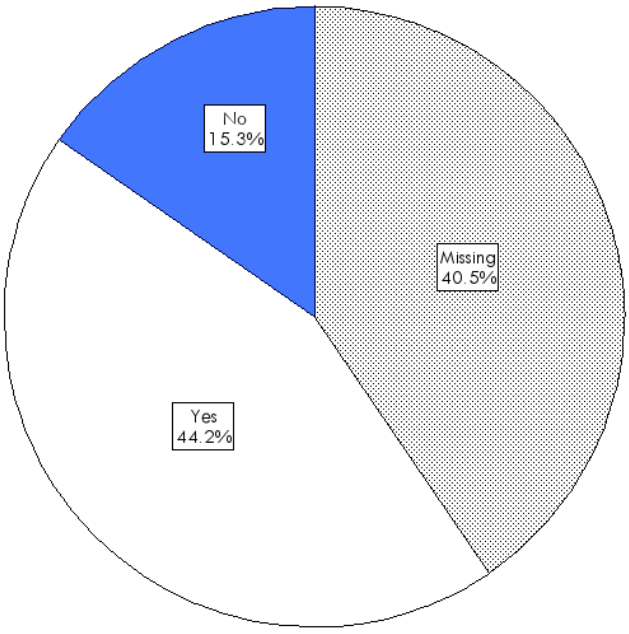


Figure 63. Distribution of managers with a clinical background

35. What is the clinical background of the administrative officer to whom you report?

When the administrative officer to whom the director or manager of respiratory care services reported had a clinical background, it was most often a nurse. Frequencies can be found in Appendix C, Table 59. Responses about the "Other" clinical backgrounds were documented in Appendix D.

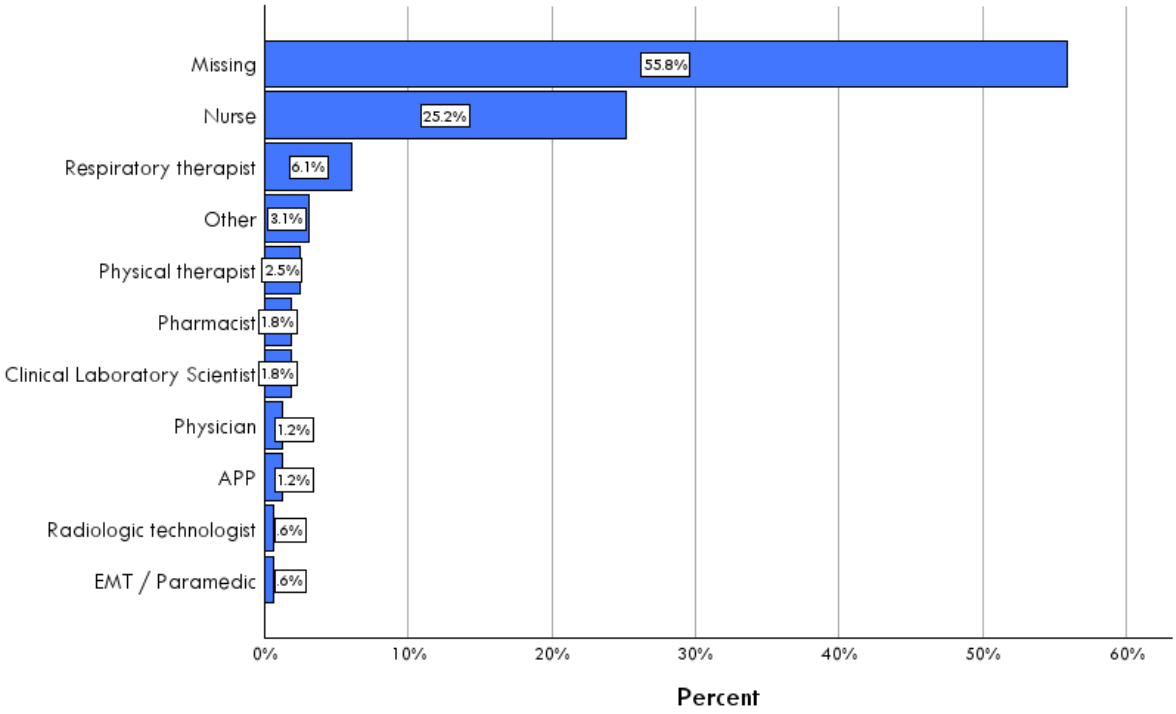


Figure 64. Clinical background of administrative officer

36. Which of the following describes the way medical direction is provided about the department's policies, procedures, and protocols?

The largest group of responses indicated that a physician provided medical direction to the department. The valid percentage of those responses was 56.7. However, there were many missing responses so the value could have been as low as 33.7. Frequencies can be found in Appendix C, Table 60.

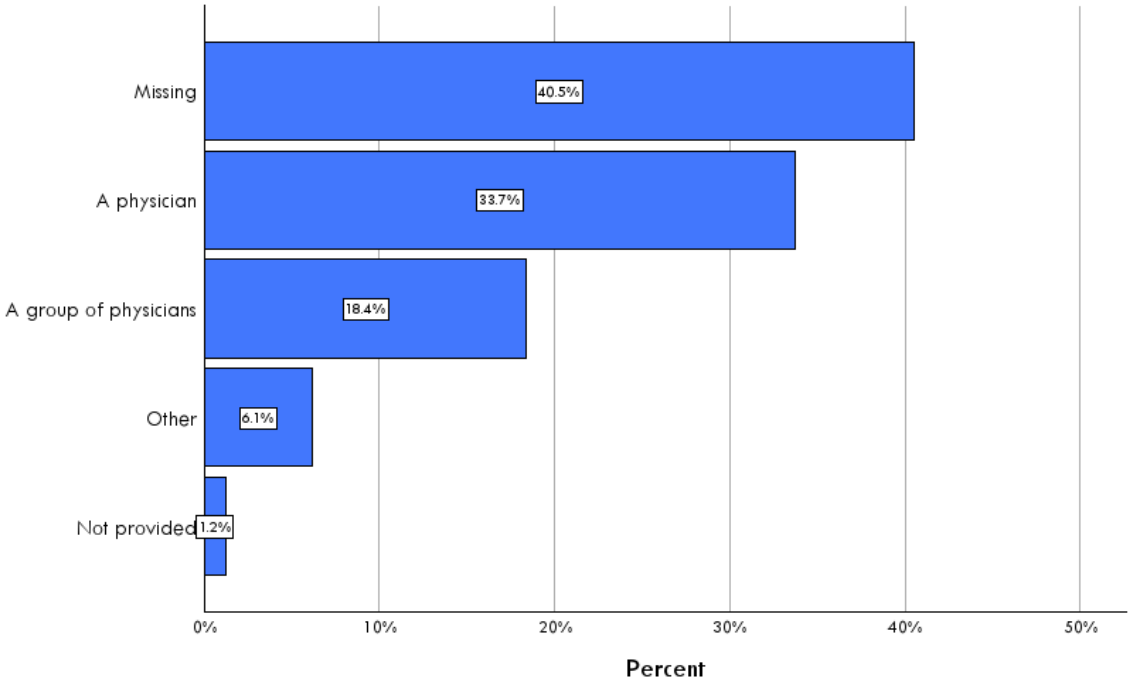


Figure 65. Medical direction

37. If a respiratory therapist attains additional certifications (e.g., intubation, ACLS), are they given additional clinical responsibilities in your organization?

The valid percent of "Yes" responses is 30.9. However, there were many missing responses so the value could have been as low as 18.4. Frequencies can be found in Appendix C, Table 61.

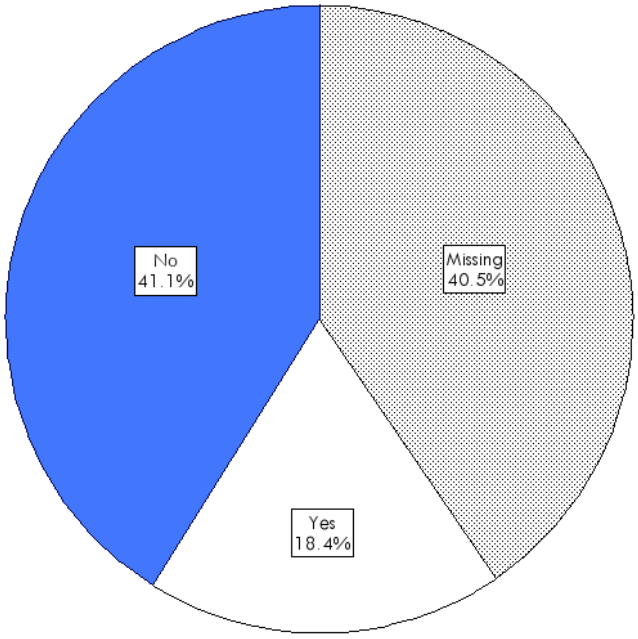


Figure 66. Distribution of additional responsibilities for additional certifications

38. Does your organization offer additional compensation for respiratory therapists who complete additional certifications (e.g., intubation, ACLS)?

The valid percent of "Yes" responses is 27.1. However, there were many missing responses so the value could have been as low as 16.0. Frequencies can be found in Appendix C, Table 62.

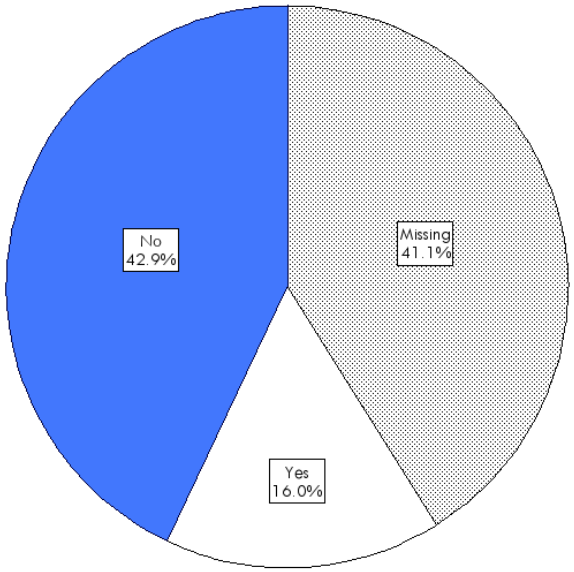


Figure 67. Distribution of additional compensation for additional certifications

39. Does your organization offer scholarships to respiratory therapy students in exchange for a commitment to employment after graduation?

The valid percent of "Yes" responses is 34.4. However, there were many missing responses so the value could have been as low as 20.2. Frequencies can be found in Appendix C, Table 63.

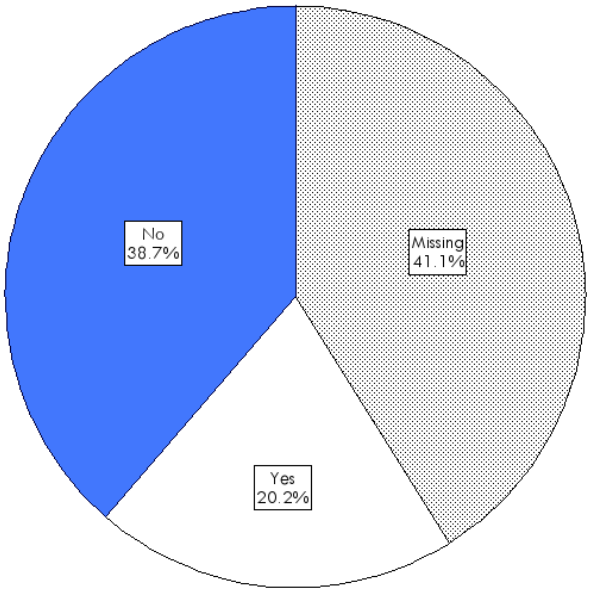


Figure 68. Scholarship offers for employment commitment

Incentives and Recruitment

40. Does your organization offer any of the following recruitment or retention incentives for respiratory care staff? Select all that apply.

Tuition reimbursement, sign-on bonuses, and specialty certification fee reimbursement were incentives used by more than one-half of these hospitals as Figure 69 showed. Responses about "Other" recruitment tools used by respondents were documented in Appendix D. Frequencies can be found in Appendix C, Table 64. Respondents could select all that applied.

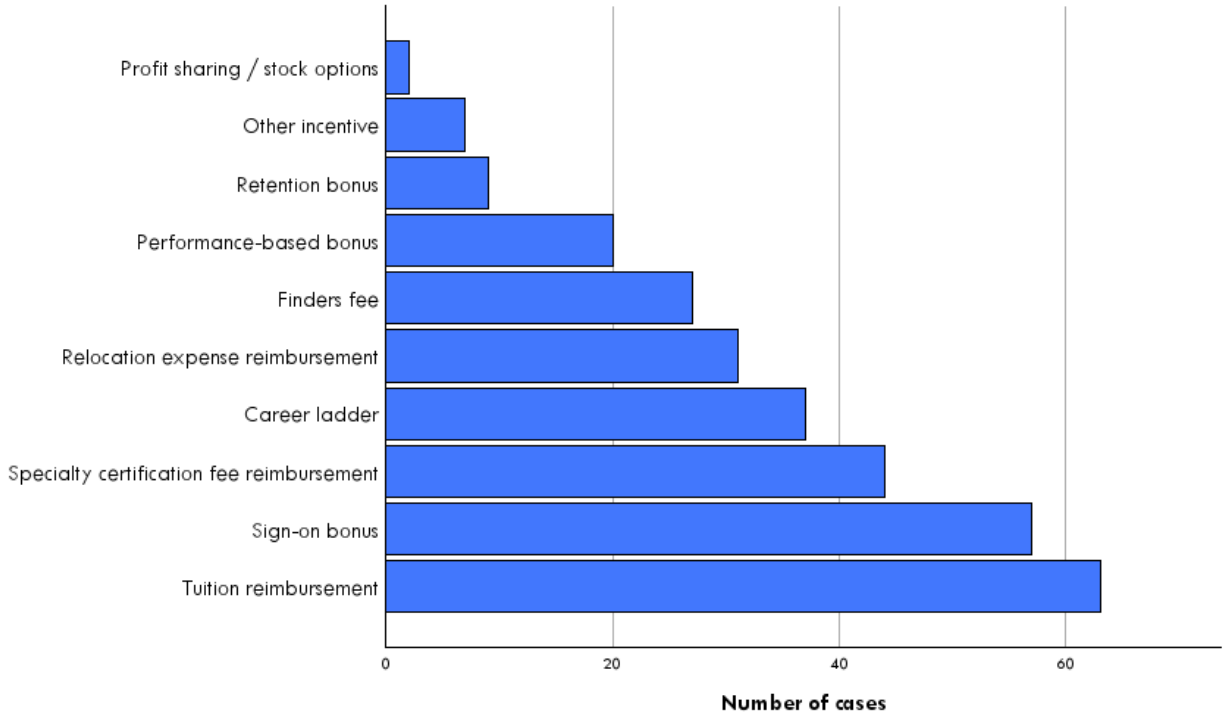


Figure 69. Recruitment/retention incentives

41. How is the availability of benefits communicated to your staff?

Most facilities used orientation materials and regular emails from the Human Resources department to communicate benefits to staff. Frequencies can be found in Appendix C, Table 65. Respondents could select all that applied.

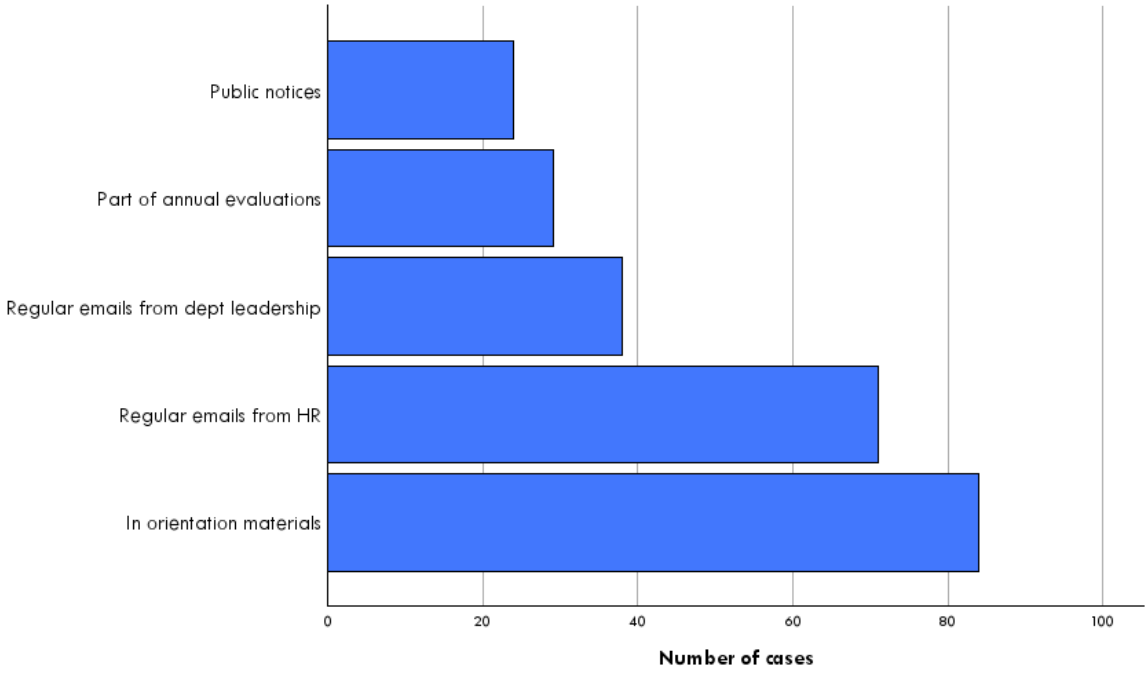


Figure 70. Methods for communicating benefits

42. Compared to the last fiscal year, has the average time needed to recruit respiratory therapists increased, decreased, or remained the same?

The largest percentage of respiratory care departments in these hospitals reported an increase in the time needed to recruit respiratory therapists. Frequencies can be found in Appendix C, Table 66.

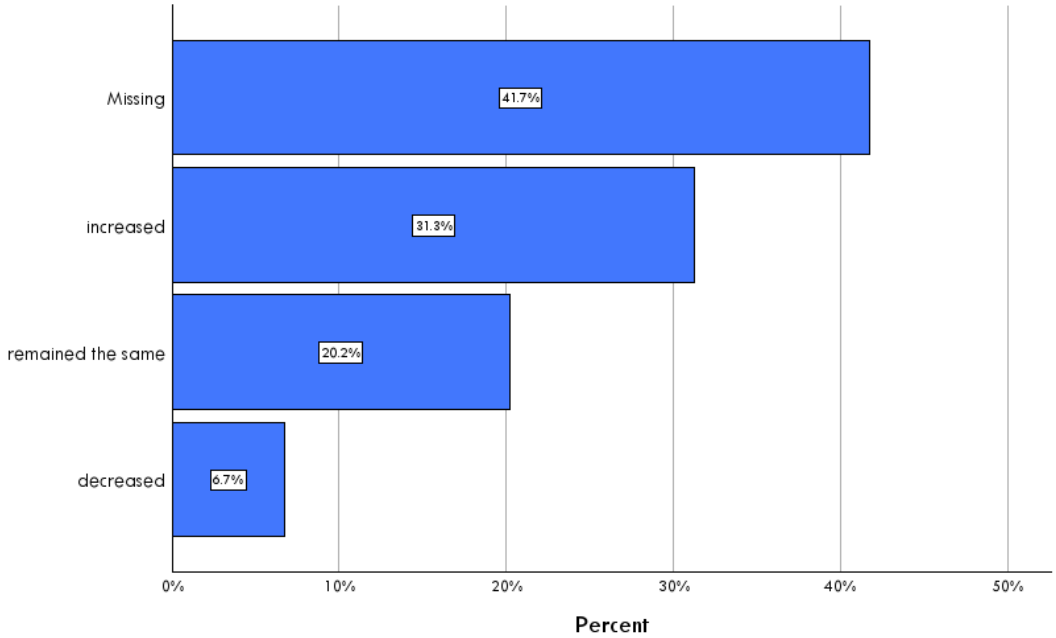


Figure 71. Time needed to recruit respiratory therapists

Turnover

43. Compared to the last fiscal year, has turnover of respiratory therapist for your organization increased, decreased or remained the same?

The rate of turnover stayed the same as reported nearly half of respondents in this study. Frequencies can be found in Appendix C, Table 67.

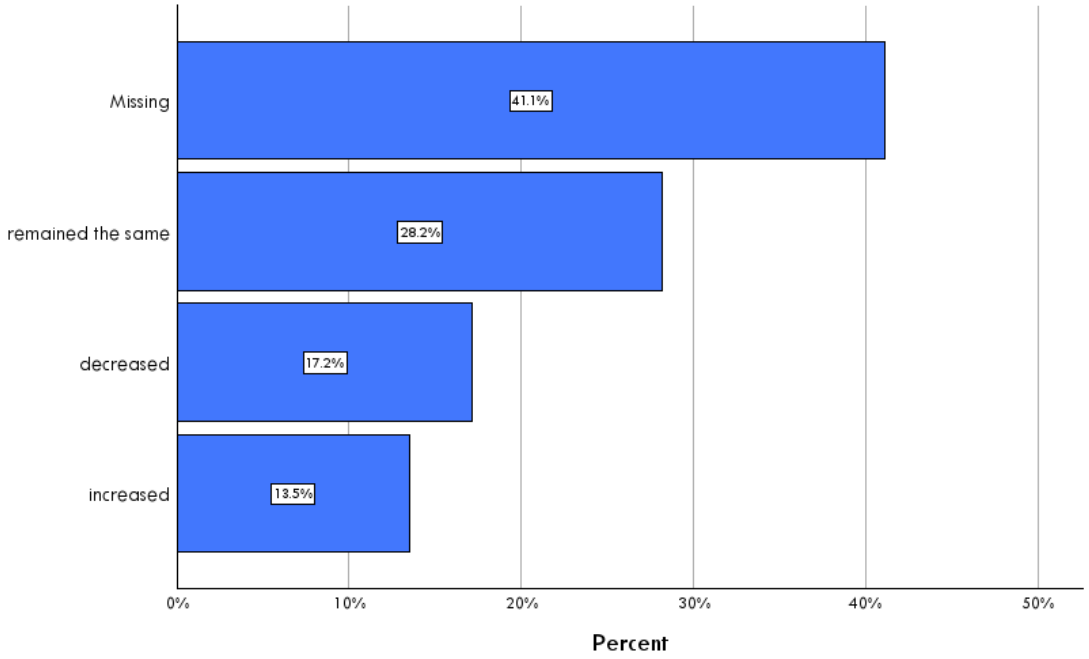


Figure 72. Turnover

Hospital and Department Size

44. Does your hospital provide 24-hour respiratory care services?

A majority of hospitals provide round-the-clock respiratory care service. Frequencies can be found in Appendix C, Table 68.

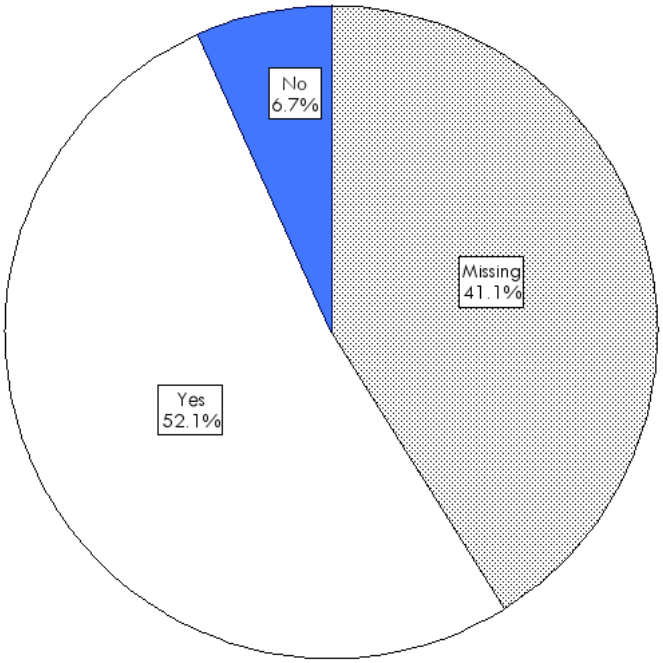


Figure 73. Continuous hours of respiratory care service

45. What is the number of staffed beds supported by this facility?

Among those who responded, there was a broad range of facility size. Frequencies can be found in Appendix C, Table 69.

Table 31. Bed size

N							
Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
97	66	253.94	30.61	147.00	301.47	10	1200

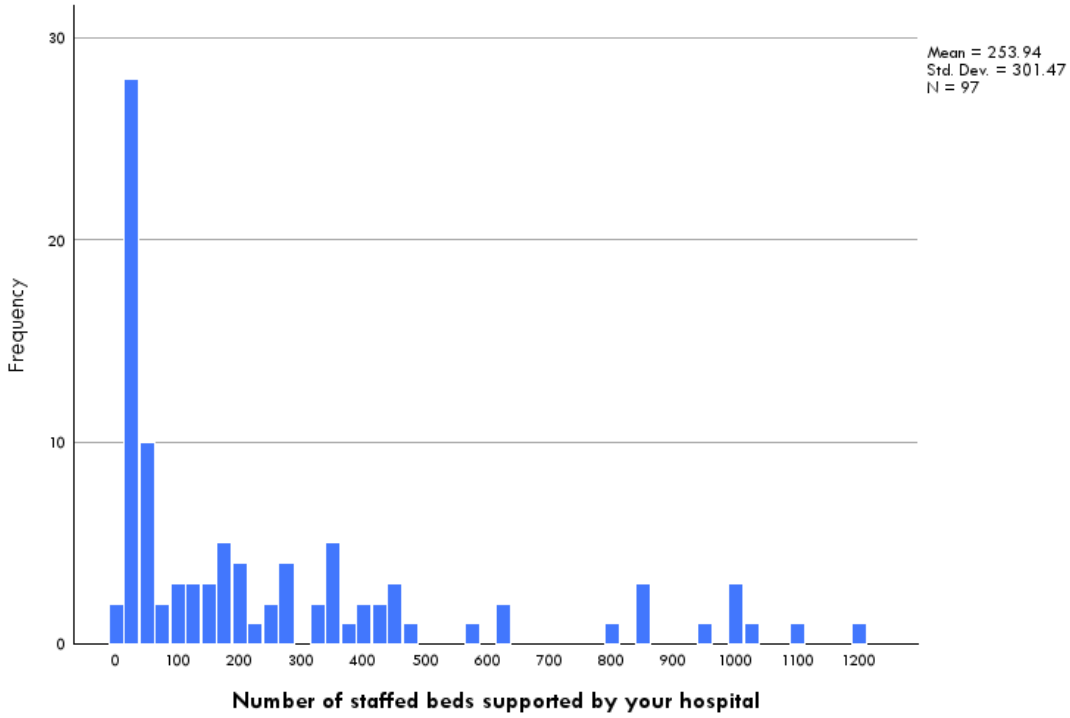


Figure 74. Bed size

46. Does your department provide a system that helps staff therapists prioritize their work assignments when there is not enough time to complete them all?

The valid percent of "Yes" responses was 62.5. However, there were many missing responses so the value could have been as low as 36.8. Frequencies can be found in Appendix C, Table 70.

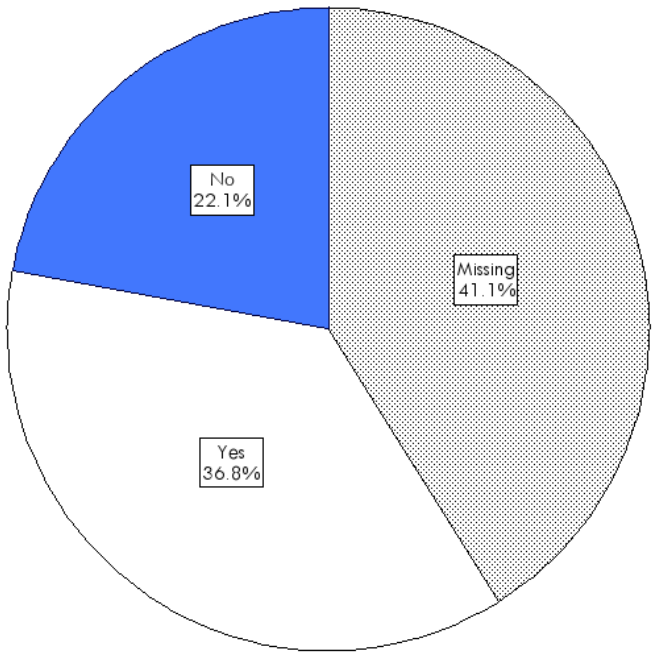


Figure 75. Availability of a work prioritization system

47. What services does the Respiratory Therapy Department provide in your hospital?

Percentages associated with services listed in Table 32 ranged from very low (hyperbaric medicine and ultrasound diagnostics=3.1%) to very high (arterial blood gas sampling=95.9%). Eighty percent or more of respondents worked in hospitals that provided services in the areas of pulmonary function testing, transportation of patients who are dependent on mechanical ventilation, participation in Medical Emergency (Rapid Response) team, overnight pulse oximetry. Services provided by at least 50% of these hospitals that we have not yet mentioned included the following:

- Arterial blood gas analysis
- Assisting with bronchoscopy (with and without EBUS)
- ECGs
- Emergency intubation
- Equipment cleaning and processing
- Patient education/disease management for asthma and COPD
- Procurement and management of medical gases
- Support for high-risk births
- Transporting patients who are dependent on oxygen

Table 32. Services provided

	Responses		
	N	Percent	Percent of Cases
Actigraphy	4	0.3%	4.1%
Arterial blood gas sampling	93	6.9%	95.9%
Arterial blood gas analysis	62	4.6%	63.9%
Arterial line insertion	13	1.0%	13.4%
Arterial line maintenance	8	0.6%	8.2%
Assisting with anesthesia in the operating room	6	0.4%	6.2%
Assisting with bronchoscopy (with and without EBUS)	51	3.8%	52.6%
Cardiology	15	1.1%	15.5%
Case management/care plan development	25	1.9%	25.8%
Distribution and management of portable oxygen	38	2.8%	39.2%
EEG	25	1.9%	25.8%
ECG	49	3.6%	50.5%
Emergency intubation	59	4.4%	60.8%
Equipment cleaning and processing	73	5.4%	75.3%
Equipment repair and biomedical support	11	0.8%	11.3%
Home care/DME	8	0.6%	8.2%

	Responses		
	N	Percent	Percent of Cases
Home sleep apnea testing	36	2.7%	37.1%
Hyperbaric medicine	3	0.2%	3.1%
Mask fit testing for respiratory protection	39	2.9%	40.2%
Metabolic monitoring	7	0.5%	7.2%
Neurodiagnostics	15	1.1%	15.5%
Overnight pulse oximetry	78	5.8%	80.4%
Participation in Medical Emergency (Rapid Response) team	86	6.4%	88.7%
Patient education/disease management for asthma and COPD	68	5.0%	70.1%
Perfusion/ECMO	11	0.8%	11.3%
Physiologic monitoring	13	1.0%	13.4%
Procurement and management of medical gases	57	4.2%	58.8%
Pulmonary function testing	91	6.8%	93.8%
Pulmonary rehabilitation	30	2.2%	30.9%
Smoking cessation instruction	44	3.3%	45.4%
Staffing for skilled nursing/rehab/LTAC	12	0.9%	12.4%
Support for high-risk births	59	4.4%	60.8%
Telemedicine/teleheath	11	0.8%	11.3%
Transporting patients who are dependent on oxygen	59	4.4%	60.8%
Transporting patients who are dependent on mechanical ventilation	86	6.4%	88.7%
Ultrasound diagnostics	3	0.2%	3.1%
Total	1348	100.0%	1389.7%

*Respondents were allowed to select all that applied. Therefore, the sum of row frequencies exceeds 291.

Subgroup Analyses

48. How many respiratory therapists (number of therapists – not FTEs) vacated a position during the last fiscal year?

Comparisons were made in Table 34 indicating the mean value for the South was significantly higher than the Midwest and West values. The influence of the regions on the number of therapists who vacated a position was moderate according to the eta squared effect size value (.100). Differences between other potential pairs of values were insignificant.

Table 33. Therapists who vacated a position by region

	N							
	Valid	Missing	Mean	Std. Error of Mean	Median	Std. Deviation	Minimum	Maximum
Full Time								
Northeast	16	8	2.69	.69	2.00	2.77	0	9
South	34	19	4.97	1.32	3.00	7.68	0	40
Midwest	45	22	2.51	.77	1.00	5.14	0	30
West	13	6	2.08	.99	1.00	3.57	0	13
F=1.522, df=3,107, p=.213 eta squared=.042								
Part Time								
Northeast	15	9	1.07	.56	.00	2.15	0	6
South	25	28	2.44	.68	1.00	3.42	0	13
Midwest	37	30	.81	.21	.00	1.29	0	6
West	11	8	.73	.27	1.00	.90	0	3
F=3.103, df=3,87, p=.031, eta squared=.100								

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 34. Mean differences between part-time therapists vacating positions by region

(I) Region	(J) Region	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Northeast	South	-1.37	.724	.061	-2.81	.07
	Midwest	.26	.679	.707	-1.09	1.61
	West	.34	.880	.701	-1.41	2.09
South	Northeast	1.37	.724	.061	-.07	2.81
	Midwest	1.63*	.574	.006	.49	2.77
	West	1.71*	.802	.036	.12	3.31
Midwest	Northeast	-.26	.679	.707	-1.61	1.09
	South	-1.63*	.574	.006	-2.77	-.49
	West	.08	.761	.913	-1.43	1.60
West	Northeast	-.34	.880	.701	-2.09	1.41
	South	-1.71*	.802	.036	-3.31	-.12
	Midwest	-.08	.761	.913	-1.60	1.43

49. What is the number of staffed beds supported by your facility?

We divided responses regarding the number of staffed beds into 3 subgroups (Less than 50, 50-200, More than 200). According to Table 36, significance testing for differences among observed and expected counts in the cells outlined in bold within Table 35 found important differences. Each expected count showed what one should expect to observe when there was no significant difference in the frequency of occurrence between bed size and urban/rural settings.

The adjusted residual value showed the number of standard deviations away from the expected count that the observed count fell. The adjusted residual values for small- and large-sized facilities exceeded 2.0, so those cells contained an important differential between observed and expected counts.

Hospitals of small and medium size occurred more frequently in rural geographic settings than in urban settings. Hospitals of large size occurred more frequently in urban settings.

Table 35. Staffed bed subgroups by community type

			Urban/Rural		
			Rural	Urban	Total
Staff beds	Less than 50	Count	**35**	**1**	36
		Expected Count	**26.7**	**9.3**	36.0
		% of Total	36.1%	1.0%	37.1%
		Adjusted Residual	4.0	-4.0	
	50 to 200	Count	16	6	22
		Expected Count	16.3	5.7	22.0
		% of Total	16.5%	6.2%	22.7%
		Adjusted Residual	-.2	.2	
	More than 200	Count	**21**	**18**	39
		Expected Count	**28.9**	**10.1**	39.0
		% of Total	21.6%	18.6%	40.2%
		Adjusted Residual	-3.8	3.8	
Total		Count	72	25	97
		Expected Count	72.0	25.0	97.0
		% of Total	74.2%	25.8%	100.0%

Table 36. Statistical significance for staffed beds by urban/rural

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18.444[a]	2	<.001
Likelihood Ratio	21.955	2	<.001
Linear-by-Linear Association	18.185	1	<.001
N of Valid Cases	97		

0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.67.

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. The following table summarized these responses by giving a high and low estimate for 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

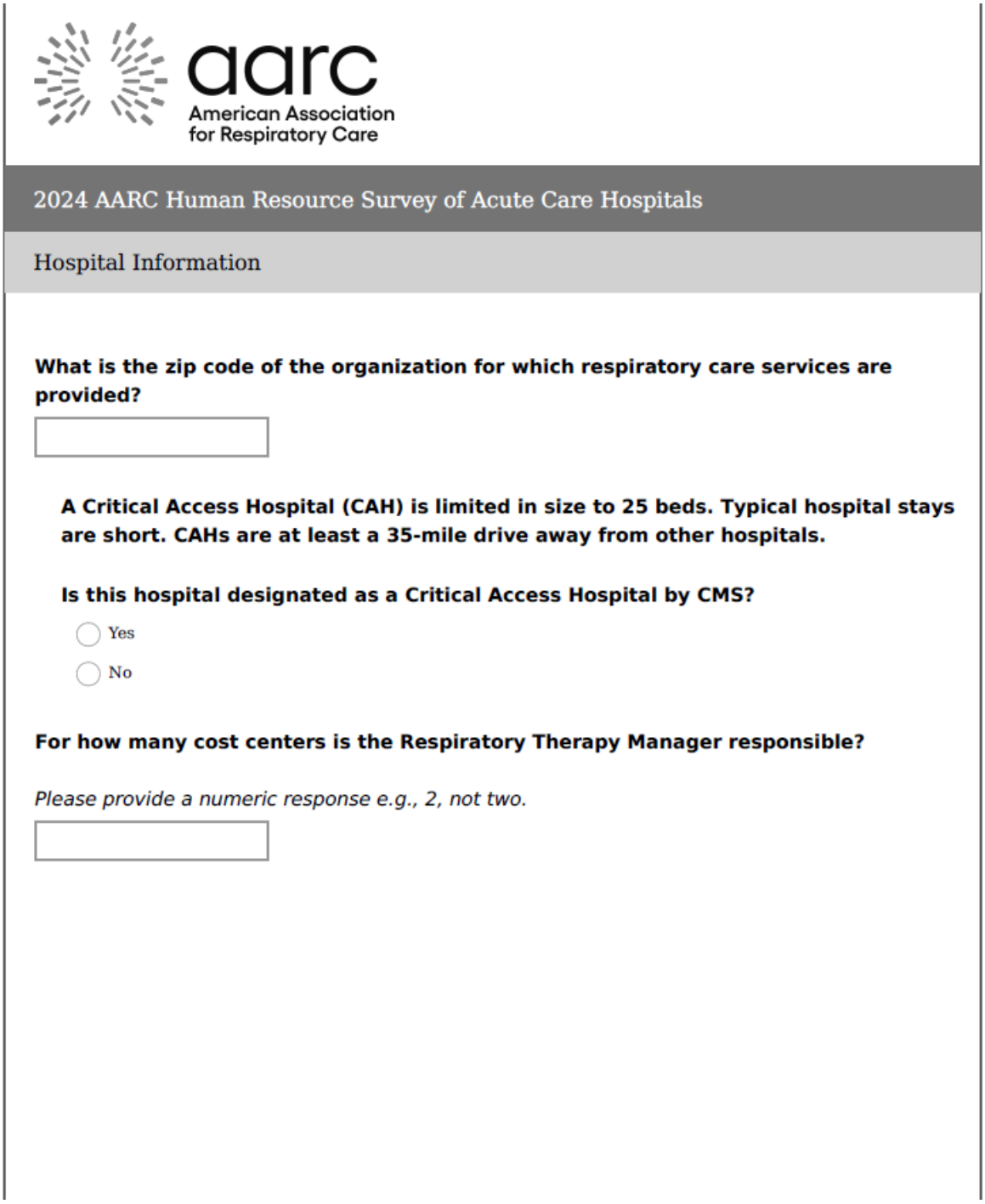
truth most likely was somewhere between the low and high estimate of each question, which was why we have summarized them here.

Lastly, we rank ordered these responses from high to low based on the value for the high estimate for the percent for which the question was true.

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

Question from the survey	Estimates of the percent for which this is true? Low	High
Does your hospital provide 24-hour respiratory care services?	52.1	88.5
Does your department routinely measure the productivity of respiratory therapists?	47.2	79.4
Does your organization use any protocols to deliver respiratory care?	46.6	78.4
Assuming you are the Director/Manager of respiratory care services, does the administrative officer to whom you report have a clinical background?	44.2	74.2
Does your department provide a system that helps staff therapists prioritize their work assignments when there is not enough time to complete them all?	36.8	62.5
Are new graduates required to attain the RRT credential within a predetermined time after the start of their employment with your organization?	58.3	58.3
Is your department required to benchmark selected productivity or quality metrics against departments of comparable hospitals?	34.4	57.7
Does your department exclusively staff therapists with the RRT credential?	41.1	41.1
Does your organization offer scholarships to respiratory therapy students in exchange for a commitment to employment after graduation?	20.2	34.4
Is this facility designated as a Critical Access Hospital by CMS?	33.1	33.8
If a respiratory therapist attains additional certifications (e.g., intubation, ACLS), is he or she given additional clinical responsibilities in your organization?	18.4	30.9
Does your organization offer additional compensation for respiratory therapists who complete additional certifications (e.g., intubation, ACLS)?	16.0	27.1
Does the organization's insurance provider test whether employees use nicotine?	11.0	23.7
Does your department differentiate work assignments based on whether staff therapists have earned the CRT and RRT credentials?	17.8	17.8

Appendix A. Human Resource Survey of Acute Care Hospitals



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Hospital Information

What is the zip code of the organization for which respiratory care services are provided?

A Critical Access Hospital (CAH) is limited in size to 25 beds. Typical hospital stays are short. CAHs are at least a 35-mile drive away from other hospitals.

Is this hospital designated as a Critical Access Hospital by CMS?

- ◯ Yes
- ◯ No

For how many cost centers is the Respiratory Therapy Manager responsible?

Please provide a numeric response e.g., 2, not two.

Please indicate the departments for which the Respiratory Therapy Manager is responsible.

- [ ] Respiratory Care
- [ ] Cardiac Rehabilitation
- [ ] ECMO
- [ ] HME / DME
- [ ] Interventional Cardiology
- [ ] Interventional Pulmonary (e.g., bronchoscopy)
- [ ] Neurodiagnostics
- [ ] Point of Care Testing
- [ ] Pulmonary Function Lab
- [ ] Pulmonary Rehabilitation
- [ ] Sleep Medicine
- [ ] Other (please specify)

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Hiring Practices and Goals

Questions on this page require a response.

*** To what degree is increasing the proportion of baccalaureate-prepared respiratory therapists a goal of your department?**

Low High

*** Does your department differentiate work assignments based on whether staff therapists have earned the CRT and RRT credentials?**

- ◯ Yes
- ◯ No

*** Does your department exclusively staff therapists with the RRT credential?**

- ◯ Yes
- ◯ No

*** Are new graduates required to attain the RRT credential within a predetermined time after the start of their employment with your organization?**

- ◯ Yes
- ◯ No

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Time Frame to Earn RRT

Upon hire, what is the time frame in which a new graduate is required to attain the RRT?

- ◯ Within 6 months
- ◯ Within 12 months
- ◯ Within 18 months
- ◯ Within 24 months
- ◯ Other (please specify)

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FTEs

What is the total number of FTEs employed in both therapist and other positions, for which the Respiratory Therapy Department Director is responsible? (e.g., 56.5)

Please use the following table as a guide:

Hours/Week (range)	FTEs
37 or more	1.0
29-36	0.8
21-28	0.6
13-20	0.4
5-12	0.2

How many FTEs does your organization budget or contract for Staff Therapist positions held by respiratory therapists *this fiscal year*? (e.g., 56.5)

Please use the following table as a guide:

Hours/Week (range)	FTEs
37 or more	1.0
29-36	0.8
21-28	0.6
13-20	0.4
5-12	0.2

How many FTEs does your organization budget or contract for the following job titles for positions held by respiratory therapists *this fiscal year? (e.g., 1.0)*

Please use the following table as a guide:

Hours/Week (range)	FTEs
37 or more	1.0
29-36	0.8
21-28	0.6
13-20	0.4
5-12	0.2

Director / Manager - A Director is defined as a respiratory therapist who is the top manager of this department

Supervisor / Shift Lead - A Supervisor is defined as a respiratory therapist other than the director who evaluates the performance of other employees

Non-supervisory, management support staff who are respiratory therapists, but are not included in other titles (e.g. clinical specialist, research coordinator)

Sleep Technologist / Specialist

Pulmonary Function Technologist

Other diagnostic technologist (e.g., noninvasive cardiology)

Department Educator - A Department Educator is defined as the person who coordinates continuing education and staff development

Disease Manager / Patient Educator

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Vacancies

How many FTE positions held by respiratory therapists did the organization typically supplement from non-employee pools, or from outside temporary staffing agencies *this fiscal year* for Staff Therapists? (e.g., 1.8)

Please use the following table as a guide:

Hours/Week (range)	FTEs
37 or more	1.0
29-36	0.8
21-28	0.6
13-20	0.4
5-12	0.2

How many FTEs to be held by respiratory therapists does the organization have vacant for Staff Therapists? (e.g., 6.5)

Please use the following table as a guide:

Hours/Week (range)	FTEs
37 or more	1.0
29-36	0.8
21-28	0.6
13-20	0.4
5-12	0.2

How many FTEs to be held by respiratory therapists does the organization have vacant for the following job titles? (e.g., 1.0)

Please use the following table as a guide:

Hours/Week (range)	FTEs
37 or more	1.0
29-36	0.8
21-28	0.6
13-20	0.4
5-12	0.2

Director / Manager - A Director is defined as a respiratory therapist who is the top manager of this department

Supervisor / Shift Lead - A Supervisor is defined as a respiratory therapist other than the director who evaluates the performance of other employees

Non-supervisory, management support staff who are respiratory therapists, but are not included in other titles (e.g. clinical specialist, research coordinator)

Sleep Technologist / Specialist

Pulmonary Function Technologist

Other diagnostic technologist (e.g., noninvasive cardiology)

Department Educator - A Department Educator is defined as the person who coordinates continuing education and staff development

Disease Manager / Patient Educator

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Future

How many FTEs to be held by respiratory therapists does the organization expect to employ *for the year 2025* for Staff Therapists? (e.g., 56.5)

Please use the following table as a guide:

Hours/Week (range)	FTEs
37 or more	1.0
29-36	0.8
21-28	0.6
13-20	0.4
5-12	0.2

How many FTEs to be held by respiratory therapists does the organization expect to employ *for the year 2025* for the following job titles? (e.g., 1.0)

Please use the following table as a guide:

Hours/Week (range)	FTEs
37 or more	1.0
29-36	0.8
21-28	0.6
13-20	0.4
5-12	0.2

Director / Manager - A Director is defined as a respiratory therapist who is the top manager of this department

Supervisor / Shift Lead - A Supervisor is defined as a respiratory therapist other than the director who evaluates the performance of other employees

Non-supervisory, management support staff who are respiratory therapists, but are not included in other titles (e.g. clinical specialist, research coordinator)

Sleep Technologist / Specialist

Pulmonary Function Technologist

Other diagnostic technologist (e.g., noninvasive cardiology)

Department Educator - A Department Educator is defined as the person who coordinates continuing education and staff development

Disease Manager / Patient Educator

2024 AARC Human Resource Survey of Acute Care Hospitals

Last Fiscal Year

How many respiratory therapists (number of therapists - not FTEs) were employed on the last day of the last fiscal year? (e.g., 39, 73)

Full-time as defined by your institution

Part-time

How many respiratory therapists (number of therapists - not FTEs) vacated a job position during the last fiscal year? (e.g., 5, 15)

Full-time as defined by your institution

Part-time

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Hourly Wage

What is the average hourly wage, including any differentials, for respiratory therapists employed by the organization in the following job titles?

Please type your responses without a dollar sign ($), e.g., 24.00 or 36.15.

Staff Therapist	
Director / Manager - A Director is defined as a respiratory therapist who is the top manager of this department	
Supervisor / Shift Lead - A Supervisor is defined as a respiratory therapist other than the director who evaluates the performance of other employees	
Non-supervisory, management support staff who are respiratory therapists, but are not included in other titles (e.g. clinical specialist, research coordinator)	
Sleep Technologist / Specialist	
Pulmonary Function Technologist	
Other diagnostic technologist (e.g., noninvasive cardiology)	
Department Educator - A Department Educator is defined as the person who coordinated continuing education and staff development	
Disease Manager / Patient Educator	

What is the average hourly pay rate, including any differentials, for respiratory therapists who are new graduates of Associate degree programs? (e.g., 24.25)

What is the average hourly pay rate, including any differentials, for respiratory therapists who are new graduates of Baccalaureate degree programs? (e.g., 24.25)

The intent behind this question is to learn about therapists who enter practice directly after completing a respiratory therapy program that awards a Baccalaureate degree.

What is the average hourly pay rate, including any differentials, for respiratory therapists who are new graduates of Master's degree programs? (e.g., 24.25)

The intent behind this question is to learn about therapists who enter practice directly after completing a respiratory therapy program that awards a Master's degree.

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Indicate the number of respiratory therapists FTEs who separated employment from your organization in the last fiscal year for the reasons listed below.

Please use the following table as a guide:

Hours/Week (range)	FTEs
37 or more	1.0
29-36	0.8
21-28	0.6
13-20	0.4
5-12	0.2

Retirement	
Voluntary separation	
Involuntary separation for inadequate performance	
Involuntary separation because of a workforce reduction (layoff)	

Approximately, what percentage of hours worked by respiratory therapists were paid as overtime in the last fiscal year?

Is your department required to benchmark selected productivity or quality metrics against departments of comparable hospitals?

- ◯ Yes
- ◯ No

How many hours does it typically take to orient a new respiratory therapist in your organization?

Please enter a number between 1 and 1200.

* **Does your department routinely measure the productivity of respiratory therapists?**

- ◯ Yes
- ◯ No

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Productivity

Which of the following is used to measure productivity in your hospital?

Select all that apply.

- [ ] Relative value units (RVUs)
- [ ] Charges
- [ ] Procedures
- [ ] Patient days
- [ ] Other (please specify)

Does your hospital benchmark department activities against the AARC Safe and Effective Staffing Guide?

- ○ Yes
- ○ No
- ○ Unfamiliar with the resource

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Protocols

Definition: 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 is allowed to initiate, discontinue, refine, transition, or restart 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.

* **Does your organization use protocols to deliver respiratory care?**

- ◯ Yes
- ◯ No

Which of the following organizations' guidelines do you follow when developing protocols?

- ☐ AARC
- ☐ AASM
- ☐ ATS
- ☐ CHEST
- ☐ ERS
- ☐ SCCM
- ☐ Other (please specify)

  [ ]

- ☐ Not applicable

2024 AARC Human Resource Survey of Acute Care Hospitals

Protocols

What types of protocols are used by respiratory therapists in your organization?

Select all that apply.

- [ ] Bronchial Hygiene
- [ ] Bronchodilator Therapy
- [ ] Disease-based (e.g., asthma, COPD)
- [ ] Mechanical Ventilation
- [ ] Oxygen
- [ ] Spontaneous Breathing Trial
- [ ] VAP / VAE
- [ ] Other (please specify)

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Recreational Substances

Does the organization's insurance provider test whether employees use nicotine?

- ◯ Yes
- ◯ No

Has cannabis been decriminalized in your state?

- ◯ Yes, for medical use
- ◯ Yes, for medical and recreational use
- ◯ No

If your organization randomly tests employees for recreational substances, which of the following can affect employment?

- ◯ 4-panel - excludes tetrahydrocannabinol from the 5-panel
- ◯ 5-panel - cocaine, amphetamines, opiates, tetrahydrocannabinol, phencyclidine
- ◯ 7-panel - adds benzodiazepines and barbiturates to the 5-panel
- ◯ 10-panel - adds methadone, propoxyphene, and quaaludes to the 7-panel
- ◯ 12-panel - adds ecstasy and oxycodone/percoset to the 10-panel
- ◯ The organization does not complete random testing.
- ◯ Do not know.

2024 AARC Human Resource Survey of Acute Care Hospitals

Report

*** Assuming you are the Director / Manager of respiratory care services, does the administrative officer to whom you report have a clinical background?**

- ◯ Yes
- ◯ No

2024 AARC Human Resource Survey of Acute Care Hospitals

Report Background

What is the clinical background of the administrative officer to whom you report?

- ◯ Advanced Practice Provider (Mid-level)
- ◯ Clinical Laboratory Scientist
- ◯ EMT / Paramedic
- ◯ Nurse
- ◯ Occupational Therapist
- ◯ Pharmacist
- ◯ Physician
- ◯ Radiologic Technologist
- ◯ Physical Therapist
- ◯ Respiratory Therapist
- ◯ Other (please specify)

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Respiratory Department

Which of the following describes the way medical direction is provided about the department's policies, procedures, and protocols?

- ◯ A physician
- ◯ A group of physicians
- ◯ Not provided
- ◯ Other (please specify)

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Certifications and Recruitment

If a respiratory therapist attains additional certifications (e.g., intubation, ACLS), are they given additional clinical responsibilities in your organization?

- ◯ Yes
- ◯ No

Does your organization offer additional compensation for respiratory therapists who complete additional certifications (e.g., intubation, ACLS)?

- ◯ Yes
- ◯ No

Does your organization offer scholarships to respiratory therapy students in exchange for a commitment to employment after graduation?

- ◯ Yes
- ◯ No

Does your organization offer any of the following recruitment or retention incentives for respiratory care staff?

Select all that apply.

- [ ] Career ladders
- [ ] Finders fee
- [ ] Performance-based bonuses
- [ ] Profit sharing / Stock options
- [ ] Relocation expense reimbursement
- [ ] Retention bonuses
- [ ] Sign-on bonus
- [ ] Specialty certification fee reimbursement (e.g., AE-C, CPFT, CRT-SDS, RRT-NPS)
- [ ] Tuition reimbursement
- [ ] Other (please specify)

How is the availability of benefits communicated to your staff?

Select all that apply.

- [ ] As a part of annual evaluations
- [ ] In orientation materials
- [ ] Public notices
- [ ] Regular email communication from department leadership
- [ ] Regular email communication from Human Resources

Compared to the last fiscal year, has the average time needed to recruit respiratory therapists

- ○ increased,
- ○ decreased, or
- ○ remained the same.

Compared to the last fiscal year, has the turnover of respiratory therapists for your organization

- ○ increased,
- ○ decreased, or
- ○ remained the same.

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Respiratory Services

Does your hospital provide 24-hour respiratory care services?

- ◯ Yes
- ◯ No

What is the number of staffed beds supported by your hospital?

Please provide a number between 1 and 2500.

Does your department provide a system that helps staff therapists prioritize their work assignments when there is not enough time to complete them all?

- ◯ Yes
- ◯ No

What services does the Respiratory Therapy Department provide in your hospital?

Select all that apply.

- [ ] Actigraphy
- [ ] Arterial blood gas sampling
- [ ] Arterial blood gas analysis
- [ ] Arterial line insertion
- [ ] Arterial line maintenance
- [ ] Assisting with anesthesia in the operating room
- [ ] Assisting with bronchoscopy (with and without EBUS)
- [ ] Cardiology
- [ ] Case management / care plan development
- [ ] Distribution and management of portable oxygen
- [ ] EEG
- [ ] ECG
- [ ] Emergency intubation
- [ ] Equipment cleaning and processing
- [ ] Equipment repair and biomedical support
- [ ] Home care / DME
- [ ] Home sleep apnea testing
- [ ] Hyperbaric medicine
- [ ] Mask fit testing for respiratory protection
- [ ] Metabolic monitoring
- [ ] Neurodiagnostics
- [ ] Overnight pulse oximetry
- [ ] Participation in Medical Emergency (Rapid Response) Teams
- [ ] Patient education / disease management for asthma and COPD
- [ ] Perfusion / ECMO
- [ ] Physiologic monitoring
- [ ] Procurement and management of medical gases
- [ ] Pulmonary function testing
- [ ] Pulmonary rehabilitation
- [ ] Smoking cessation instruction
- [ ] Staffing for skilled nursing / rehab / LTAC
- [ ] Support for high-risk births
- [ ] Telemedicine / telehealth
- [ ] Transporting patients who are dependent on oxygen
- [ ] Transporting patients who are dependent on mechanical ventilation
- [ ] Ultrasound diagnostics

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2024 AARC Human Resource Survey of Acute Care Hospitals

Drawing Registration

For submitting a **completed** survey, you can receive a copy of the report describing the results.

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

Please provide your contact information to receive the report.

Name:	
Email Address:	
Phone Number:	
AARC Member #:	

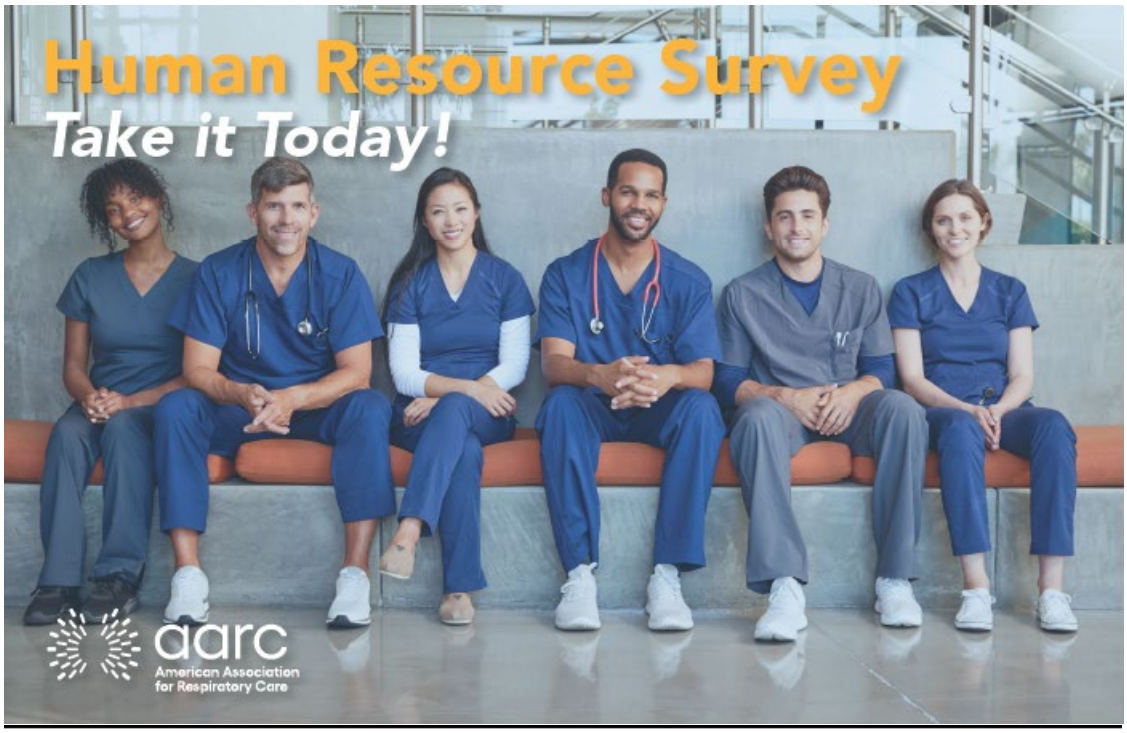
2024 AARC Human Resource Survey of Acute Care Hospitals

Conclusion

Thank you for completing the AARC Human Resource Survey for Acute Care Hospitals!

Appendix B. Contents of the Study Solicitations and Social Media Posts

Postcard mailed to Acute Care Hospitals:



NBRC
The National Board for Respiratory Care
10801 Mastin Street, Suite 300
Overland Park, KS 66210

aarc
American Association for Respiratory Care

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

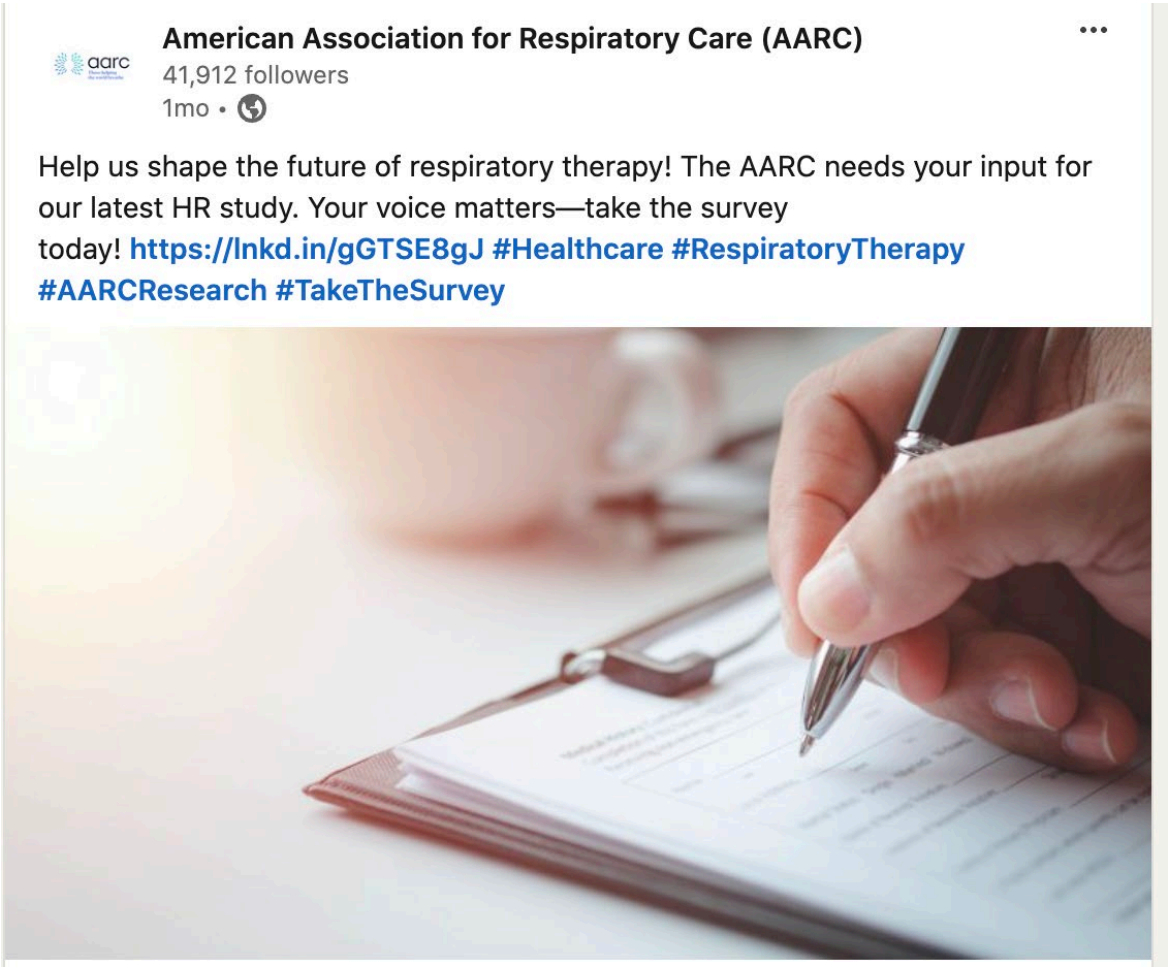
You should be able to complete the survey within 20 minutes. Each person who submits a full set of survey responses will receive a report of the results.

Follow the link below to take the Acute Care Hospital Survey for your institution. **The response deadline is Friday, July 26.** If you have questions or experience difficulties, contact Jennifer Benavente at AARC.AcuteCare@nbrc.org.

nbrc.org/acutecare

Carl Hinkson, MS, RRT, RRT-NPS, RRT-ACCS, FAARC
AARC President

Sample social media posts



The AARC is launching a new human resource study, and we need your help! By participating, you'll contribute to vital strategic planning, government relations, and programming. Our past studies, including the 2017 education survey, have made significant impacts. Join us in shaping the future—take the survey now! **https://lnkd.in/gGTSE8gJ #AARC #RespiratoryTherapy #HealthcareResearch #TakeTheSurvey**

American Association for Respiratory Care (AARC)
41,912 followers
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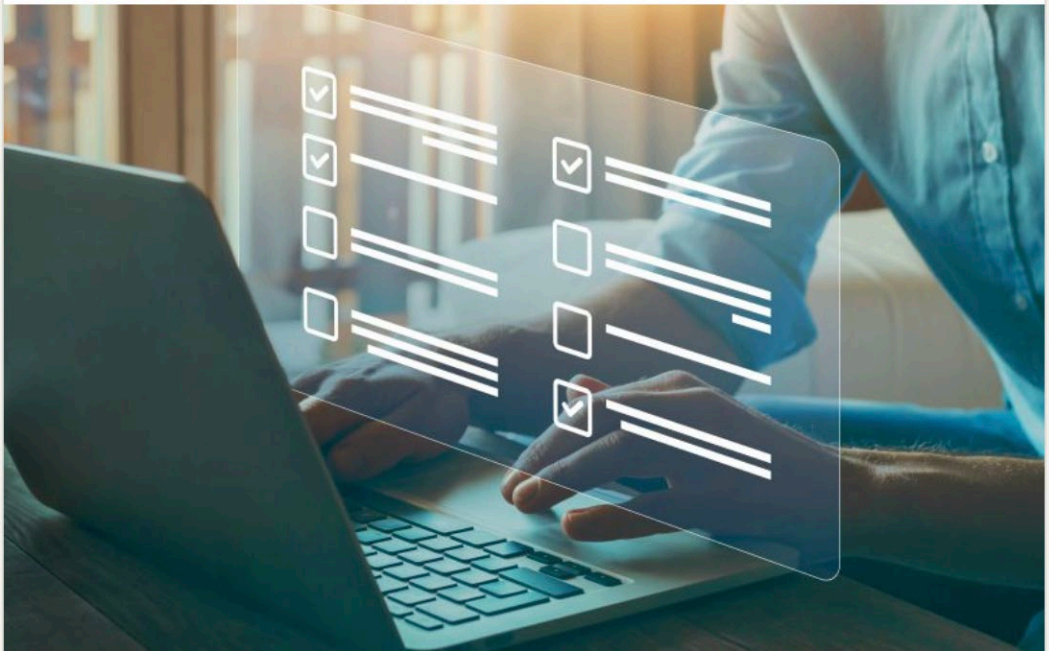
The AARC is conducting a new human resource study, and we need your input! Your participation will aid in strategic planning, government relations, and programming. Previous studies have provided invaluable insig ...see more



Appendix C. Frequency Tables

Table 38. Respondents and All Hospitals by State

Return to Figure 1

		Responses				All hospitals in population that were mailed postcards	
		Frequency	Percent	Valid Percent	Cumulative Percent	Frequency	Percent
Valid	AL	3	1.8	1.8	1.8	34	1.2
	AK	0	.0	.0	1.8	5	0.2
	AZ	1	.6	.6	2.5	28	1.0
	AR	6	3.7	3.7	6.1	67	2.4
	CA	1	.6	.6	6.7	159	5.6
	CO	2	1.2	1.2	8.0	44	1.5
	CT	1	.6	.6	8.6	23	0.8
	DC	0	.0	.0	8.6	6	0.2
	DE	3	1.8	1.8	10.4	6	0.2
	FL	4	2.5	2.5	12.9	100	3.5
	GA	4	2.5	2.5	15.3	63	2.2
	HI	2	1.2	1.2	16.6	9	0.3
	ID	2	1.2	1.2	17.8	20	0.7
	IL	8	4.9	4.9	22.7	119	4.2
	IN	6	3.7	3.7	26.4	75	2.6
	IA	7	4.3	4.3	30.7	93	3.3
	KS	10	6.1	6.1	36.8	79	2.8
	KY	4	2.5	2.5	39.3	29	1.0
	LA	2	1.2	1.2	40.5	54	1.9
	ME	1	.6	.6	41.1	24	0.8
	MD	2	1.2	1.2	42.3	39	1.4
	MA	3	1.8	1.8	44.2	44	1.5
	MI	3	1.8	1.8	46.0	106	3.7
	MN	3	1.8	1.8	47.9	61	2.1
	MS	1	.6	.6	48.5	29	1.0
	MO	12	7.4	7.4	55.8	116	4.1
	MT	4	2.5	2.5	58.3	21	0.7
	NE	7	4.3	4.3	62.6	33	1.2

	Responses				All hospitals in population that were mailed postcards	
	Frequency	Percent	Valid Percent	Cumulative Percent	Frequency	Percent
NV	1	.6	.6	63.2	12	0.4
NH	3	1.8	1.8	65.0	21	0.7
NJ	2	1.2	1.2	66.3	61	2.1
NM	0	.0	.0	66.3	18	0.6
NY	7	4.3	4.3	70.6	116	4.1
NC	4	2.5	2.5	73.0	57	2.0
ND	1	.6	.6	73.6	10	0.4
OH	5	3.1	3.1	76.7	102	3.6
OK	1	.6	.6	77.3	65	2.3
OR	2	1.2	1.2	78.5	56	2.0
PA	6	3.7	3.7	82.2	100	3.5
PR	0	.0	.0	82.2	1	0.0
RI	0	.0	.0	82.2	7	0.2
SC	1	.6	.6	82.8	46	1.6
SD	0	.0	.0	82.8	17	0.6
TN	5	3.1	3.1	85.9	53	1.9
TX	9	5.5	5.5	91.4	390	13.7
UT	1	.6	.6	92.0	21	0.7
VT	1	.6	.6	92.6	7	0.2
VA	3	1.8	1.8	94.5	53	1.9
WA	0	.0	.0	94.5	39	1.4
WV	1	.6	.6	95.1	37	1.3
WI	5	3.1	3.1	98.2	64	2.2
WY	3	1.8	1.8	100.0	9	0.3
Total	163	100.0	100.0		2849	100.0

Table 39. Distribution of respondents by region

Return to Figure 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Northeast	24	14.7	14.7	14.7
	South	53	32.5	32.5	47.2
	Midwest	67	41.1	41.1	88.3
	West	19	11.7	11.7	100.0
	Total	163	100.0	100.0	

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 40. Distribution of respondents by census division*

Return to Figure 3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - New England	9	5.5	5.5	5.5
	2 - Middle Atlantic	15	9.2	9.2	14.7
	3 - South Atlantic	22	13.5	13.5	28.2
	4 - East North Central	27	16.6	16.6	44.8
	5 - West North Central	40	24.5	24.5	69.3
	6 - East South Central	13	8.0	8.0	77.3
	7 - West South Central	18	11.0	11.0	88.3
	8 - Mountain	14	8.6	8.6	96.9
	9 - Pacific	5	3.1	3.1	100.0
	Total	163	100.0	100.0	

*Divisions from US Census Bureau:
1: New England– MA, RI, NH, ME, VT, CT;
2: Middle Atlantic– NJ, NY, PA;
3: South Atlantic– DE, DC, MD, VA, WV, NC, SC, GA, FL;
4: East North Central– OH, IN, MI, WI, IL;
5: West North Central – IA, MN, SD, ND, MO, KS, NE;
6: East South Central – AL, TN, MS, KY;
7: West South Central – LA, AR, OK, TX;
8: Mountain – MT, CO, WY, ID, UT, AZ, NM, NV;
9: Pacific – CA, HI, OR, WA, AK

Table 41. Distribution of urban and rural facilities

Return to Figure 4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rural	118	72.4	72.4	72.4
	Urban	45	27.6	27.6	100.0
	Total	163	100.0	100.0	

* Based on US Census Bureau estimates of cities with estimated populations greater than 100,000 in 2022, based on 2020 census.

Table 42. Designation as Critical Access Hospital by CMS

Return to Figure 5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	54	33.1	33.8	33.8
	No	106	65.0	66.3	100.0
	Total	160	98.2	100.0	
Missing	System	3	1.8		
Total		163	100.0		

Table 43. Number of Cost Centers for which RT Manager is Responsible

Return to Figure 6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	33	20.2	20.6	20.6
	2	40	24.5	25.0	45.6
	3	37	22.7	23.1	68.8
	4	28	17.2	17.5	86.3
	5	7	4.3	4.4	90.6
	6	10	6.1	6.3	96.9
	7	3	1.8	1.9	98.8
	8	2	1.2	1.3	100.0
	Total	160	98.2	100.0	
Missing	System	3	1.8		
Total		163	100.0		

Table 44. Importance Rating for Goal of Increasing BS-Prepared Therapists

Return to Figure 9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	37	22.7	22.7	22.7
	1	6	3.7	3.7	26.4
	2	3	1.8	1.8	28.2
	3	6	3.7	3.7	31.9
	4	2	1.2	1.2	33.1
	5	2	1.2	1.2	34.4
	10	8	4.9	4.9	39.3
	11	1	.6	.6	39.9
	14	1	.6	.6	40.5
	15	2	1.2	1.2	41.7
	20	2	1.2	1.2	42.9
	21	1	.6	.6	43.6
	24	1	.6	.6	44.2
	25	8	4.9	4.9	49.1
	26	2	1.2	1.2	50.3
	27	1	.6	.6	50.9
	28	1	.6	.6	51.5
	29	1	.6	.6	52.1
	30	6	3.7	3.7	55.8
	33	2	1.2	1.2	57.1
	35	2	1.2	1.2	58.3
	38	1	.6	.6	58.9
	39	1	.6	.6	59.5
	40	1	.6	.6	60.1
	43	1	.6	.6	60.7
	45	2	1.2	1.2	62.0
	47	1	.6	.6	62.6
	49	1	.6	.6	63.2
	50	19	11.7	11.7	74.8
	51	2	1.2	1.2	76.1
	52	1	.6	.6	76.7
	53	1	.6	.6	77.3
	54	1	.6	.6	77.9
	60	4	2.5	2.5	80.4

		Frequency	Percent	Valid Percent	Cumulative Percent
	65	2	1.2	1.2	81.6
	70	3	1.8	1.8	83.4
	74	1	.6	.6	84.0
	75	5	3.1	3.1	87.1
	76	1	.6	.6	87.7
	77	1	.6	.6	88.3
	80	2	1.2	1.2	89.6
	82	1	.6	.6	90.2
	90	4	2.5	2.5	92.6
	98	1	.6	.6	93.3
	99	1	.6	.6	93.9
	100	10	6.1	6.1	100.0
	Total	163	100.0	100.0	

Table 45. Differentiation of work assignments based on credential

Return to Figure 10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	29	17.8	17.8	17.8
	No	134	82.2	82.2	100.0
	Total	163	100.0	100.0	

Table 46. RRT requirement for employment

Return to Figure 11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	67	41.1	41.1	41.1
	No	96	58.9	58.9	100.0
	Total	163	100.0	100.0	

Table 47. RRT attainment requirement

Return to Figure 12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	95	58.3	58.3	58.3
	No	68	41.7	41.7	100.0
	Total	163	100.0	100.0	

Table 48. Time frame to earn RRT credential upon hire

Return to Figure 13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Within 6 months	37	22.7	38.5	38.5
	Within 12 months	33	20.2	34.4	72.9
	Within 18 months	2	1.2	2.1	75.0
	Within 24 months	4	2.5	4.2	79.2
	RRT Required for hire	14	8.6	14.6	93.8
	Other	6	3.7	6.3	100.0
	Total	96	58.9	100.0	
Missing	System	67	41.1		
Total		163	100.0		

Table 49. Percentage of hours paid as overtime

Return to Figure 54

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-4%	18	11.0	19.4	19.4
	5-9%	22	13.5	23.7	43.0
	10-14%	20	12.3	21.5	64.5
	15-19%	7	4.3	7.5	72.0
	20-24%	9	5.5	9.7	81.7
	25-29%	6	3.7	6.5	88.2
	30-34%	5	3.1	5.4	93.5
	35-39%	1	.6	1.1	94.6
	40-44%	2	1.2	2.2	96.8
	50-54%	1	.6	1.1	97.8
	60-64%	1	.6	1.1	98.9
	75% or more	1	.6	1.1	100.0
	Total	93	57.1	100.0	
Missing	System	70	42.9		
Total		163	100.0		

Table 50. Benchmark requirement

Return to Figure 55

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	56	34.4	57.7	57.7
	No	41	25.2	42.3	100.0
	Total	97	59.5	100.0	
Missing	System	66	40.5		
Total		163	100.0		

Table 51. Hours to orient new RT

Return to Figure 56

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	1	.6	1.1	1.1
	36	4	2.5	4.3	5.4
	40	3	1.8	3.2	8.6
	50	1	.6	1.1	9.7
	60	2	1.2	2.2	11.8
	72	5	3.1	5.4	17.2
	80	5	3.1	5.4	22.6
	90	1	.6	1.1	23.7
	100	3	1.8	3.2	26.9
	108	2	1.2	2.2	29.0
	120	2	1.2	2.2	31.2
	144	7	4.3	7.5	38.7
	150	2	1.2	2.2	40.9
	160	6	3.7	6.5	47.3
	200	6	3.7	6.5	53.8
	216	6	3.7	6.5	60.2
	225	1	.6	1.1	61.3
	240	5	3.1	5.4	66.7
	250	1	.6	1.1	67.7
	260	1	.6	1.1	68.8
	288	2	1.2	2.2	71.0
	300	6	3.7	6.5	77.4
	320	2	1.2	2.2	79.6
	324	1	.6	1.1	80.6

		Frequency	Percent	Valid Percent	Cumulative Percent
	350	1	.6	1.1	81.7
	360	5	3.1	5.4	87.1
	400	2	1.2	2.2	89.2
	432	6	3.7	6.5	95.7
	480	1	.6	1.1	96.8
	500	1	.6	1.1	97.8
	576	1	.6	1.1	98.9
	900	1	.6	1.1	100.0
	Total	93	57.1	100.0	
Missing	System	70	42.9		
Total		163	100.0		

Table 52. Department productivity measures

Return to Figure 51

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	77	47.2	79.4	79.4
	No	20	12.3	20.6	100.0
	Total	97	59.5	100.0	
Missing	System	66	40.5		
Total		163	100.0		

Table 53. Benchmark against SESG

Return to Figure 58

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	16.6	35.1	35.1
	No	39	23.9	50.6	85.7
	Unfamiliar with the resource	11	6.7	14.3	100.0
	Total	77	47.2	100.0	
Missing	System	86	52.8		
Total		163	100.0		

Table 54. Use of protocols

Return to Figure 59

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	76	46.6	78.4	78.4
	No	21	12.9	21.6	100.0
	Total	97	59.5	100.0	
Missing	System	66	40.5		
Total		163	100.0		

Table 55. Organization's insurance tests for nicotine use

Return to Figure 60

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	11.0	23.7	23.7
	No	58	35.6	76.3	100.0
	Total	76	46.6	100.0	
Missing	System	87	53.4		
Total		163	100.0		

Table 56. Decriminalization of cannabis in respondent's state

Return to Figure 61

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, for medical use	16	9.8	21.3	21.3
	Yes, for medical and recreational use	29	17.8	38.7	60.0
	No	30	18.4	40.0	100.0
	Total	75	46.0	100.0	
Missing	System	88	54.0		
Total		163	100.0		

Table 57. Random drug testing that can affect employment

Return to Figure 62

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7-panel	1	.6	1.3	1.3
	10-panel	3	1.8	4.0	5.3
	12-panel	1	.6	1.3	6.7
	The organization does not complete random testing	31	19.0	41.3	48.0
	Do not know	39	23.9	52.0	100.0
	Total	75	46.0	100.0	
Missing	System	88	54.0		
Total		163	100.0		

Table 58. Manager with clinical background

Return to Figure 63

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	72	44.2	74.2	74.2
	No	25	15.3	25.8	100.0
	Total	97	59.5	100.0	
Missing	System	66	40.5		
Total		163	100.0		

Table 59. Clinical background of manager

Return to Figure 65

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	APP	2	1.2	2.8	2.8
	Clinical Laboratory Scientist	3	1.8	4.2	6.9
	EMT / Paramedic	1	.6	1.4	8.3
	Nurse	41	25.2	56.9	65.3
	Pharmacist	3	1.8	4.2	69.4
	Physician	2	1.2	2.8	72.2
	Radiologic technologist	1	.6	1.4	73.6
	Physical therapist	4	2.5	5.6	79.2
	Respiratory therapist	10	6.1	13.9	93.1
	Other	5	3.1	6.9	100.0
	Total	72	44.2	100.0	
Missing	System	91	55.8		
Total		163	100.0		

Table 60. Provider of medical direction

Return to Figure 55

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A physician	55	33.7	56.7	56.7
	A group of physicians	30	18.4	30.9	87.6
	Not provided	2	1.2	2.1	89.7
	Other	10	6.1	10.3	100.0
	Total	97	59.5	100.0	
Missing	System	66	40.5		
Total		163	100.0		

Table 61. Additional responsibilities for additional certifications

Return to Figure 66

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	30	18.4	30.9	30.9
	No	67	41.1	69.1	100.0
	Total	97	59.5	100.0	
Missing	System	66	40.5		
Total		163	100.0		

Table 62. Additional compensation for additional certifications

Return to Figure 67

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	26	16.0	27.1	27.1
	No	70	42.9	72.9	100.0
	Total	96	58.9	100.0	
Missing	System	67	41.1		
Total		163	100.0		

Table 63. Scholarship offers for employment commitment

Return to Figure 68

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	33	20.2	34.4	34.4
	No	63	38.7	65.6	100.0
	Total	96	58.9	100.0	
Missing	System	67	41.1		
Total		163	100.0		

Table 64. Recruitment / retention incentives

Return to Figure 69

	Responses		
	N	Percent	Percent of Cases
Career ladders	37	12.5%	43.0%
Finders fee	27	9.1%	31.4%
Performance-based bonuses	20	6.7%	23.3%
Profit sharing / Stock options	2	0.7%	2.3%
Relocation expense reimbursement	31	10.4%	36.0%
Retention bonuses	9	3.0%	10.5%
Sign-on bonus	57	19.2%	66.3%
Specialty certification fee reimbursement	44	14.8%	51.2%
Tuition reimbursement	63	21.2%	73.3%
Other	7	2.4%	8.1%
Total	297	100.0%	345.3%

Table 65. Methods for communicating benefits

Return to Figure 70

	Responses		
	N	Percent	Percent of Cases
As a part of annual evaluations	29	11.8%	30.5%
In orientation materials	84	34.1%	88.4%
Public notices	24	9.8%	25.3%
Regular email communication from department leadership	38	15.4%	40.0%
Regular email communication from Human Resources	71	28.9%	74.7%
Total	246	100.0%	258.9%

Table 66. Time needed to recruit respiratory therapists

Return to Figure 71

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	increased	51	31.3	53.7	53.7
	decreased	11	6.7	11.6	65.3
	remained the same	33	20.2	34.7	100.0
	Total	95	58.3	100.0	
Missing	System	68	41.7		
Total		163	100.0		

Table 67. Staff turnover

Return to Figure 72

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	increased	22	13.5	22.9	22.9
	decreased	28	17.2	29.2	52.1
	remained the same	46	28.2	47.9	100.0
	Total	96	58.9	100.0	
Missing	System	67	41.1		
Total		163	100.0		

Table 68. Availability of 24-hour respiratory care service

Return to Figure 73

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	85	52.1	88.5	88.5
	No	11	6.7	11.5	100.0
	Total	96	58.9	100.0	
Missing	System	67	41.1		
Total		163	100.0		

Table 69. Bed size

Return to Figure 74

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	1	.6	1.0	1.0
	12	1	.6	1.0	2.1
	16	1	.6	1.0	3.1
	20	3	1.8	3.1	6.2
	21	1	.6	1.0	7.2
	22	2	1.2	2.1	9.3
	23	1	.6	1.0	10.3
	24	2	1.2	2.1	12.4
	25	18	11.0	18.6	30.9
	42	1	.6	1.0	32.0
	43	2	1.2	2.1	34.0
	47	1	.6	1.0	35.1
	48	1	.6	1.0	36.1
	49	1	.6	1.0	37.1

	Frequency	Percent	Valid Percent	Cumulative Percent
52	2	1.2	2.1	39.2
55	1	.6	1.0	40.2
60	1	.6	1.0	41.2
68	1	.6	1.0	42.3
80	1	.6	1.0	43.3
99	2	1.2	2.1	45.4
100	1	.6	1.0	46.4
116	1	.6	1.0	47.4
127	1	.6	1.0	48.5
130	1	.6	1.0	49.5
147	1	.6	1.0	50.5
150	1	.6	1.0	51.5
160	1	.6	1.0	52.6
167	1	.6	1.0	53.6
168	1	.6	1.0	54.6
170	1	.6	1.0	55.7
175	1	.6	1.0	56.7
178	1	.6	1.0	57.7
189	1	.6	1.0	58.8
200	1	.6	1.0	59.8
206	1	.6	1.0	60.8
208	1	.6	1.0	61.9
215	1	.6	1.0	62.9
250	1	.6	1.0	63.9
260	1	.6	1.0	64.9
275	1	.6	1.0	66.0
279	1	.6	1.0	67.0
280	1	.6	1.0	68.0
281	1	.6	1.0	69.1
315	1	.6	1.0	70.1
330	1	.6	1.0	71.1
345	1	.6	1.0	72.2
350	3	1.8	3.1	75.3
351	1	.6	1.0	76.3
375	1	.6	1.0	77.3
400	2	1.2	2.1	79.4

		Frequency	Percent	Valid Percent	Cumulative Percent
	420	2	1.2	2.1	81.4
	440	1	.6	1.0	82.5
	450	2	1.2	2.1	84.5
	480	1	.6	1.0	85.6
	583	1	.6	1.0	86.6
	620	2	1.2	2.1	88.7
	808	1	.6	1.0	89.7
	850	2	1.2	2.1	91.8
	855	1	.6	1.0	92.8
	950	1	.6	1.0	93.8
	995	1	.6	1.0	94.8
	1000	1	.6	1.0	95.9
	1005	1	.6	1.0	96.9
	1018	1	.6	1.0	97.9
	1100	1	.6	1.0	99.0
	1200	1	.6	1.0	100.0
	Total	97	59.5	100.0	
Missing	System	66	40.5		
Total		163	100.0		

Table 70. Availability of a work prioritization system

Return to Figure 75

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	60	36.8	62.5	62.5
	No	36	22.1	37.5	100.0
	Total	96	58.9	100.0	
Missing	System	67	41.1		
Total		163	100.0		

Appendix D. Other Responses

Indicate the departments for which the respiratory manager is responsible.

- Adult and NICU are 2 different cost centers.
- Critical Care Medicine (provider group)
- Emergency Preparedness
- EVS SW Case management and UR
- Full Accreditation and oversight
- Off-site labs
- Palliative Care Clinic
- RT School and RT Disease Management
- Some of these departments fall under the same cost center
- stand alone emergency department near by
- We now have a director, not a manager, that oversees all of respiratory therapy and potential labs in our health system/sister hospitals.
- Whole blood lab
- Women and Children's Respiratory Services

Upon hire, what is the time frame in which a new graduate is required to attain the RRT?

- 1 year post graduation date from respiratory school
- 3 Months
- It has been six months since the pandemic. Returning to at start later this year.
- prior to hire or with in 3 months
- They may work under limited permit until it expires.
- We do not hire CRT's, although we technically can.

Which of the following is used to measure productivity in your institution?

- #of hrs worked compared to #hrs spent performing procedures
- APC
- Cardiopulmonary Rehab uses visits
- equipment and patient checks / assessments (vent Q2, evals)
- participation in committees/projects/other
- Statistical time codes
- Unaware of some and it's been changed many times
- Units of Service
- Working on moving toward APCs based on the SESG

Which of the following organizations guidelines do you follow when developing protocols?

- ACHC
- ACHC - AASM
- CAP (2 responses))
- cms
- Evidenced based practice models
- other nursing resources
- Various
- VHA

What types of protocols are being used by respiratory therapists in your organization?

- Chest Trauma, Apnea/Brain Death, Heart Extubation, Heliox, Specialty Nebs, Epoprostenol, Nitric Oxide
- hyperinflation protocol
- NIV, HHF, Extubation, Nitric Oxide
- Sleep studies, titrations, cardiopulmonary Rehab modalities
- thoracic surgery

Assuming you are the director/manager of respiratory care services, what is the clinical background of the administrative officer to whom you report?

- CNO 12 years experience
- director of nursing
- Nuclear medicine
- Nurse And Respiratory Therapist
- Pharmacist

Which of the following describes the way medical direction is provided about the department's policies, procedures, and protocols?

- Corporate executives
- Group
- Medical director and medical staff
- mid- level PA then a Physician DO
- Multi disciplinary panel nurses, physicians in specialties, nursing and RT
- multidisciplinary approach
- Physician, respiratory, and nursing manager with limited long time ago nursing experience- leans heavy on the nurse's desires over all
- Physicians and RT Managers.
- Respiratory Therapy System Collaborative Group
- Shared Leadership/ Peers approved by Physician Group

Does your organization offer any of the following recruitment or retention incentives for respiratory care staff?

- annual pay scale increase (union matrix)
- assistance of $7,850 per year to attain BSRT, MSRT, or doctorate
- clinical ladder, more pay for NPS or ACCS certification
- nursing only
- State license fee reimbursement up to $100.00
- Union contract - automatic step grade increases
- Working on career ladder