

## Executive Summary

This report was prepared by the San Francisco Bay Region Center of Excellence for Labor Market Research (COE). The COE aspires to be the leading source of regional workforce information and insight for community colleges and their workforce partners. The COE is located at City College of San Francisco and serves the 28 community colleges in the 12-county Bay Region with labor market information and workforce research.

To better understand the hiring needs, requirements and preferences of hospitals and other organizations that employ Respiratory Therapists (RTs), the COE conducted a survey to gather information that would assist community colleges with preparations to offer a Bachelor's degree program in Respiratory Therapy. The survey sought to determine current and future labor market demand for RTs, level of difficulty finding qualified RTs, preferences for education levels, RT recruitment strategies and interest in collaborating with community colleges with Respiratory Therapy programs. Survey questions also covered current workforce training and development practices, trends related to respiratory care practices and clinical skills, and employer perspectives on Bachelor's degrees in Respiratory Therapy.

Overall, survey findings indicate strong support for offering a Bachelor's degree in Respiratory Therapy at Bay Area community colleges. Survey participants reported currently employing close to 1,100 Respiratory Therapists (RTs) combined **and expect to employ more than 800 additional RTs in the next 12 months.**

Almost all respondents (n=15) indicated that the scope of practice and clinical skills for Respiratory Therapists **have expanded and become more complex**, and more than half (n=11) of employers reported having some to extreme difficulty in finding qualified candidates for positions. Many employers also gave examples of tasks they would **prefer to have a Bachelor's degree RT perform.**

### Methodology

Data were collected via an online survey sent to employers of Respiratory Therapists in California between December 7-20, 2021. The Qualtrics platform was used to administer the survey. The survey was sent to 45 employers in the 12-county Bay Area region and also via an email listserv to members of the California Society for Respiratory Care (CSRC).

## Who Responded to the Survey?

A total of 21 employers responded to the Bay Area survey, with 17 completing and 4 partially responding to the survey. The greatest number of respondents were located in Santa Clara County, as shown in Figure 1 below. San Luis Obispo and Santa Barbara were also included as Bay Area counties for the purposes of this survey. Most respondents were employers at Hospitals (n=16), Government-affiliated or General, while other respondents were from Physician's offices or other Specialty facilities, as shown in Figure 1 below.

**Figure 1: Respondents by County and Organizational Type**

County	Count	Organization Type	Count
Santa Clara	7	Hospitals (Federal, State or Local Government)	8
Alameda	3	General Medical and Surgical Hospitals	8
Monterey	3	Offices of Physicians (except Mental Health Specialists)	1
Solano	2	Specialty (except Psychiatric, Substance Abuse) Hospitals	1
Marin	1	Other: Integrated System including Acute/Post-Acute facilities, Mental Health Facility and Outpatient facilities.	1
San Luis Obispo	1	Other: Level II Trauma Center	1
Santa Barbara	1	<b>Total</b>	<b>20</b>
San Mateo	1		
Santa Cruz	1		
Sonoma	1		
<b>Total</b>	<b>21</b>		

Survey respondents were also major employers of Respiratory Therapists (RTs), with participants reporting that they currently employ close to 1,100 RTs combined and **expect to employ more than 800 additional RTs in the next 12 months**, shown in Figures 2 and 3 below.

**Figures 2 & 3: Current and Projected Employment of Respiratory Therapists by Employers**

How many Respiratory Therapists do you <b>currently employ</b> ?		
FT Respiratory Therapists	Per diem/PT Respiratory Therapists	Total
799	297	1,096

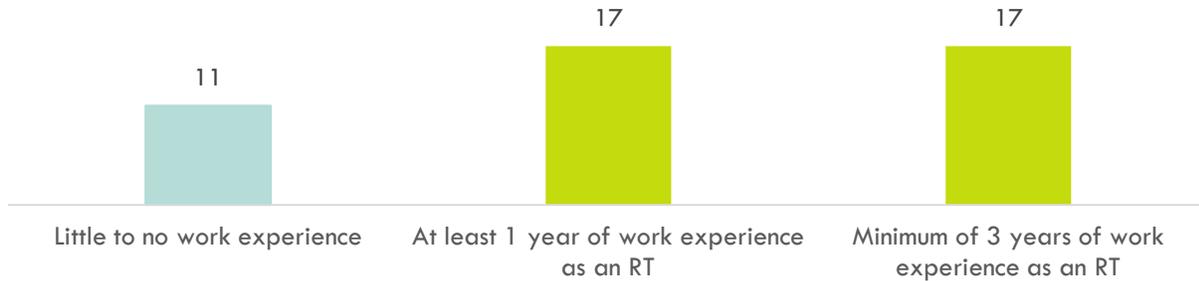
How many Respiratory Therapists do you <b>expect to employ in the next 12 months</b> ?		
FT Respiratory Therapists	Per diem/PT Respiratory Therapists	Total
577	235	812

## Employer Hiring Needs, Requirements and Preferences

All employers, except for one, indicated **currently having open positions for RTs**, including both Full- and Part-time or Per diem positions. Posting positions on job search sites is the most common method for recruiting potential job candidates (n=17), followed by partnering with a college or university to recruit graduates (n=10), and participating in job fairs (n=9).

Most respondents (n=17) **require that candidates have some work experience to be hired as a RT**: ranging from at least 1 year experience to a minimum of 3 years, shown in Figure 4 below.

**Figure 4: My organization hires Respiratory Therapists with:**



**Other work experience requirements not listed above:**

- Neonatal/Pediatric experience. NRP and RRT
- New grads are selected from time to time
- Newly licensed RCP can be hired into the residency program.
- NICU RCPs must be intubation certified with a minimum of 5-6 years of experience.
- Prefer 2 years of ICU and NICU
- Prefer experience in critical care; adult or pediatric
- Their interview is scored - if score not high enough then they are passed over

As shown in Figure 5 below, most respondents **require a minimum of an Associate degree in Respiratory Therapy** (n=11) to be qualified for a position at their organization, with 2 respondents indicating they require a Bachelor’s degree in Respiratory Therapy as a minimum for hiring. When asked their preference, the **most popular educational preference was for an Associate or Bachelor’s degree in Respiratory Therapy** (n=10), followed by a Bachelor’s degree in Respiratory Therapy or a related health field (n=3).

**Figure 5: Educational Requirements and Preferences for Respiratory Therapist Positions**

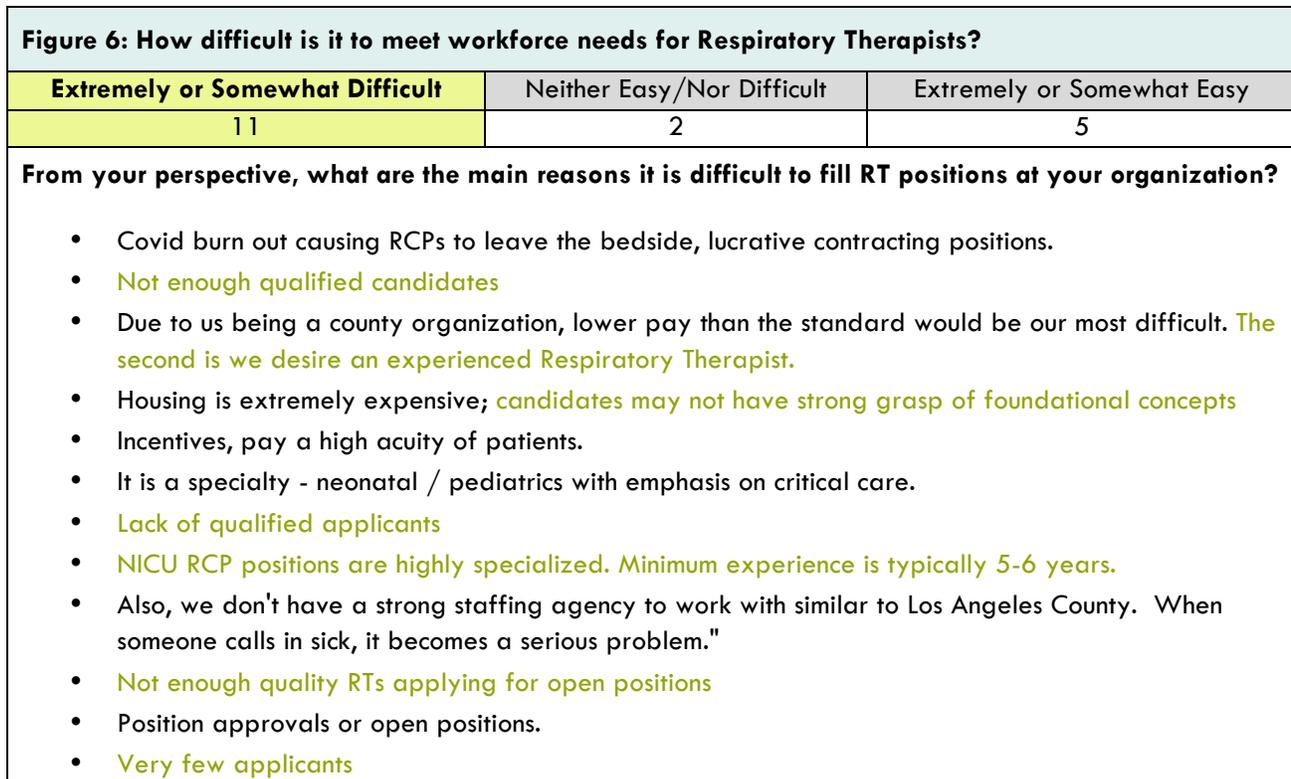
What level of education is <b>required</b> for RT positions at your organization?		What level of education is <b>preferred</b> for RT positions at your organization?	
Educational level	#	Educational level	#
Associate degree in RT	11	Associate or Bachelor’s degree in RT	10
Bachelor’s degree in RT	2	Bachelor’s degree in RT or health field	3
		Bachelor’s degree in RT	1
		Associate degree in RT	1

**Other educational requirements:**

- All are RRT and have A.S., except one CRT that has been here since the 90's
- Bachelor's Degree preferred; however many therapists in CA do not have bachelor's degree
- Will hire Associates but prefer BS degree
- CA licensed

Most employers (n=13) indicated **being aware of proposed changes** to require a Bachelor’s degree education for RTs in the future.

Many respondents (n=11) also indicated having extreme or some difficulty in meeting their workforce needs related to RTs. Asked to elaborate on what they think may be causing these difficulties, 7 respondents referenced **not having enough candidates or qualified candidates** to recruit from, presented in Figure 6 below (see highlighted responses).



## Workforce Training and Development<sup>1</sup>

Turning to workforce training and development, a majority of employers indicated support for further education for their RTs, with more than half (n=12) reporting that their organization **provides financial assistance** for current employees to pursue higher education. Several employers **also provide increased salary and other incentives** to Respiratory Therapists with a Bachelor’s degree in Respiratory Therapy, as shown in Figure 7 below.

Among employers who do not currently provide increased salary or other incentives for a Bachelor’s degree in RT, several respondents (n=8) indicated that it might definitely or probably be possible to offer these incentives in the future.

<sup>1</sup> Sixteen (16) respondents completed the remaining questions in this survey, beginning with the section Workforce Training and Development.

Figure 7: Organizational Support for Workforce Education and Development	
My organization...	Yes
Offers <b>financial assistance</b> for current employees to pursue higher education, such as a Bachelor's degree in Respiratory Therapy.	13
Does or would offer a <b>salary incentive</b> to RTs with a Bachelor's degree in RT.	6
Does or would offer <b>other incentives</b> to RTs with a Bachelor's degree in RT.	5
<b>What other incentives in support of education might be possible in the future at your organization?</b> <ul style="list-style-type: none"> <li>• Compensation, clinical ladder</li> <li>• Increased pay option</li> <li>• Pay incentive</li> <li>• Placement of jobs</li> <li>• They would be preferred candidates for leads, staff development, and supervisory positions.</li> <li>• RTs with a BS are shift team leads (charge RTs), transport RTs or department educators.</li> <li>• Ability to advance</li> <li>• Options for advancement</li> <li>• Education reimbursement</li> <li>• Scholarships towards receiving the BSRT</li> <li>• Student Loan Forgiveness</li> </ul>	

Asked their perspective on the degree of difficulty in **providing on the job training to RTs** on their staff, close to half of respondents reported extreme or somewhat difficulty in keeping RTs trained in new technologies or software applications (n=7) or supporting entry level RTs to promote within their organization (n=8), as shown in Figure 8 below.

Figure 8: Organizational Difficulty in Providing On the Job Training and Support		
Keeping RTs trained in new technologies or software applications		
Extremely or Somewhat Difficult	Neither Easy/Nor Difficult	Extremely or Somewhat Easy
7	8	2
Prepare and support entry level RTs to promote		
Extremely or Somewhat Difficult	Neither Easy/Nor Difficult	Extremely or Somewhat Easy
8	7	2

## Respiratory Care Practice and Clinical Skills

In addition to hiring and workforce development, employers were asked to discuss if and how the **scope of practice** and **clinical skill requirements** have changed for RTs. Almost all respondents indicated that the scope of practice and clinical skills had both expanded (n=15) and become more complex (n=15) in recent years, as shown in Figure 9 below.

**Figure 9: Scope of Practice and Clinical Skills**

<b>Has the scope of practice expanded for RTs at your organization?</b>	<b>Yes = 15</b>
<p><b>Please give an example of how the scope of practice as expanded in your organization:</b></p> <ul style="list-style-type: none"> <li>• Airway maintenance for conscious sedation in ER, attendance at all births, transports for diagnostic studies more frequent, application of best practices at the bedside, interdisciplinary team conferences, increase modalities of ventilation both invasively and non invasively, tracheostomy maintenance, routine changes, bedside bronchoscopy, triaging multiple requests and many more</li> <li>• Assisting bronchoscopies. Participating ECMO.</li> <li>• Bronchoscopies, trach changes, art-line insertion, intubations, hemodynamic monitoring, DME case management, COPD/smoking cessation position, HFV management</li> <li>• ECMO</li> <li>• Encouraging therapists to retrieve their certifications ACCS, RPFT</li> <li>• Placing arterial lines under the supervision of an MD, involving COPD educators</li> <li>• RCP's intubate, and initiate iNO in the NICU, start arterial lines and run blood gases in the ICU.</li> <li>• Therapists acting as case managers for patients with Chronic Respiratory Diseases to help reduce readmissions. Also advanced interventional bronch. therapists - helping out with very advanced bronchoscopies (some performed with a robotic bronch. system)</li> <li>• Transport, Intubation, ECMO, Bronchoscopy, Asthma Educator, RT case manager, Patient Safety Coach, Clinical Preceptor</li> <li>• Use of Nitric Oxide, Percutaneous Bedside Bronchoscopies Scope Assist, VDR4, Intubations, ECMO, High Level Disinfection (bronchoscope)</li> <li>• We have added more policies and procedures to our clinical toolbox. i.e Heliox, V60 High Flow nasal cannula.</li> <li>• Almost all therapy is guided by protocols</li> <li>• Protocols</li> <li>• Work under protocols. Very autonomous</li> </ul>	
<b>Have the clinical skills performed by RTs become more complex?</b>	<b>Yes = 15</b>
<p><b>Please give an example of how RT's clinical skills are becoming more complex in your organization.</b></p> <ul style="list-style-type: none"> <li>• Advanced practitioners with great critical thinking skills needed and great assessment skills - not just button turners or treatment jockies</li> <li>• Assessment skills, airway skills, lab interpretation, best practice guideline, ARDS.net, RCP driven protocols especially re weaning from ventilator</li> <li>• Art line placement, process improvement projects, involvement in interdisciplinary teams, more education directed at discharge planning, mechanical ventilation oversight with COVID</li> <li>• Arterial line insertions, critical thinking</li> <li>• ECMO, bronch training, critical care transport...</li> <li>• It is an expectation that all RCPs know how to assist with Bronchoscopy, Intubations, Full PFTs, Nitric Oxide, HFOV, VDR4, cross-training into EEG, ABG point of care testing</li> <li>• More independent management of all therapies &amp; vents</li> </ul>	

- Need to utilize multiple types of ventilators and keep up competencies. We have 13 different ventilators that RCPs need to be familiar and use them every day.
- Nitric oxide administration with and without ventilator support.
- Ventilator monitoring has become more complex.
- We've been asked to take on arterial line insertion
- RTs are part of the multidisciplinary team and are expected to assist doctors with patient procedures and clinical decisions. RTs have moved away from just following orders to collaborating with the multidisciplinary team in decision making.
- Protocols
- RCP driven protocols for ventilator management in the ICU. COVID has made management of respiratory patients more complex.

**Are there other types of changes to RT responsibilities or work activities?**

- EEG training is something new that we are starting to cross over to. I only have two EEG techs in the hospital so if one of them goes on vacation or calls in sick it becomes a serious issue. Not everyone is trained on performing full PFTs with the body box, so this is an area that we need to improve on. We often have to cancel OP PFTs when a staff member calls in sick. Staffing is the biggest issue right now with COVID.
- Ability to cross train to EEG and PFT
- Nursing education, educating nurse students at their college, prepping nurses for COVID patients, prone teams
- Physician Assistants
- RCPs are part of care team. Their voices are important to the overall medical interventions for the patients.
- Waiting on APRT as pulmonologists would like this position at VMC

## Employer Perspectives on Bachelor's Degrees in Respiratory Therapy

Employers were also asked if there are tasks or responsibilities that their organization **would prefer to be performed by a RT with a Bachelor's degree in Respiratory Therapy**, with several providing examples of relevant tasks. See Figure 10 below for further information.

Figure 10: Respiratory Therapists' Tasks and Responsibilities	
Are there tasks and responsibilities that your organization <b>prefers to be performed by a RT with a Bachelor's degree in Respiratory Therapy</b> ?	Yes = 8
<p><b>What tasks and responsibilities would your organization prefer to be performed by a RT with a Bachelor's degree in Respiratory Therapy?</b></p> <ul style="list-style-type: none"> <li>• Complex waived testing- per CLIA</li> <li>• How to write, implement, and conduct surveillance on new policies and procedures. To be prepared for management or supervisor-level duties as it pertains to respiratory care.</li> </ul>	

- Management. Clinical specialist.
- Point of care coordinator- overseeing the respiratory care lab and CAP inspections
- Transport, charge RT and department education.
- Education and leadership roles
- Career advancement requires higher degrees.

## Collaboration with Bay Area Community Colleges

Wrapping up the survey, the final questions focused on opportunities to collaborate with community colleges around supporting the development of qualified candidates in Respiratory Therapy.

Most respondents reported being aware (n=14) that a Bachelor’s degree in Respiratory Therapy is offered at some community colleges in California, as shown in Figure 11 below. All respondents were also aware of the 5 community colleges in the Bay Area that offer an Associate or Bachelor’s degree in Respiratory Therapy (Foothill, Hartnell, Napa, Ohlone and Skyline). Two respondents were aware of Respiratory Therapy programs offered at community colleges outside of the Bay Area.

**All 16 respondents** indicated that they offer clinical rotations for Respiratory Therapist students, with Hartnell, Foothill, Ohlone and Skyline listed as the most common colleges with which respondents partner to provide clinical rotation opportunities.

In conclusion, respondents offered additional support for offering Bachelor’s degree programs in Respiratory Therapy at community colleges, presented in Figure 11 below.

<b>Figure 11: Collaborating with Bay Area Community Colleges</b>	
Were you <b>aware that Bachelor’s degrees in Respiratory Therapy were available</b> through California’s community colleges?	<b>Yes = 15</b>
Does your organization <b>currently offer clinical rotations</b> for Respiratory Therapy students?	<b>Yes = 16</b>
<p><b>Do you have any additional comments?</b></p> <ul style="list-style-type: none"> <li>• Bachelor's degree programs are sorely needed. Allowing community colleges to offer these advanced degrees would be very advantageous to CA Resp programs and CA respiratory therapists. Many other states already have this in place so they have many more Respiratory Therapists with a bachelor's degree. It would be awesome if CA could do the same.</li> <li>• Offer Bachelor’s degree at Napa Community College</li> <li>• Also offer a polysomnographic tech program as we are also in desperate need of them in this area.</li> </ul>	

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