**Supplemental Digital Content**

**Supplemental Table 1. Complete Survey Questionnaire**

**Social isolation**

1. Do you have as much contact as you would like with someone you feel close to, someone you can trust and confide in?
   1. Yes
   2. No

**Perceived Stress Scale**

0–never 1–almost never 2–sometimes 3–fairly often 4–very often

1. In the last month, how often have you felt that you were unable to control the important things in your life?
2. In the last month, how often have you felt confident about your ability to handle your personal problems?
3. In the last month, how often have you felt that things were going your way?
4. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

**Job Satisfaction**

1—Not at all 2 3 4 5—Extremely/Very much

1. In general, how satisfied are you with your job?
2. Within the next year, how likely are you to seek a new job?
3. How likely would you be to recommend your job to a friend/colleague?
4. In retrospect, how much do you feel your job measures up to your initial expectations?

**PERMAH Wellbeing Survey**

1. In general, how often do you feel positive?

0—Never 1 2 3 4 5 6 7 8 9 10—Always

1. How often do you become absorbed in what you are doing?

0—Never 1 2 3 4 5 6 7 8 9 10—Always

1. How satisfied are you with your personal relationships?

0—Not at all 1 2 3 4 5 6 7 8 9 10—Completely

1. In general, to what extent do you lead a purposeful and meaningful life?

0—Not at all 1 2 3 4 5 6 7 8 9 10—Completely

1. How much of the time do you feel you are making progress towards accomplishing your goals?

0—Never 1 2 3 4 5 6 7 8 9 10—Always

1. In general, how would you say your health is?

0—Terrible 1 2 3 4 5 6 7 8 9 10—Excellent

**Depression/Anxiety:** *Over the last 2 weeks, how often have you been bothered by the following problems?*

0—Not at all 1—Several Days 2—More than Half the Days 3—Nearly Every Day

1. Little interest or pleasure in doing things
2. Feeling down, depressed or hopeless
3. Feeling nervous, anxious or on edge
4. Not being able to stop or control worrying

**Sleep Quality Rating**

0—Very Good 1 2 3—Very Bad

1. How would you rate your sleep quality over the previous month?

**2-Question Summative Maslach Burnout Inventory**

0—Never 1—A few times a year or less 2—Once a month or less 3—Once a week 4—A few times a week 5—Every day

1. I feel burned out from my work
2. I have become more callous toward people since I took this job

**Demographics**

1. What is your age?
2. How do you identify?
   1. Female
   2. Male
   3. Transgender female
   4. Transgender male
   5. Genderqueer/Gender non-conforming
   6. Different identity
   7. Decline to state
3. What ethnicity do you identify with?
   1. White/Caucasian
   2. Black/African American
   3. Asian
   4. American Indian or Alaska Native
   5. Native Hawaiian or other Pacific Islander
   6. A mix of the above
   7. None of the above
4. How many years have you been in practice after training?
   1. 0-5 years
   2. 6-10 years
   3. 11-15 years
   4. 16-25 years
   5. >25 years
   6. I am retired
5. What is your level of training?
   1. MD/DO/MBBS
   2. CRNA
   3. AA
   4. Other

If other, please describe your level of training

1. In what time zone do you practice?
   1. Pacific
   2. Mountain
   3. Central
   4. Eastern
   5. Hawaii/Alaska
   6. I practice outside of the U.S.
2. What is your primary practice setting?
   1. Private
   2. Academic
   3. Military
   4. Other

**COVID Impacts**

1. Has your academic time been affected by COVID-19?
   1. Increase
   2. Decrease
   3. No change
2. Has your academic productivity been affected by COVID-19?
   1. Increase
   2. Decrease
   3. No change
3. What is your primary site of practice?
   1. Free-standing pediatric hospital
   2. Adult hospital
   3. Pediatric hospital within an adult hospital
   4. Ambulatory surgi-center
   5. Clinic setting
   6. Other

If other, what is your primary site of practice?

1. Because of my experiences with COVID-19, I plan to (select the response that most closely applies)
   1. Make no changes in my work/job responsibilities
   2. Remain in my job but seek changes in my responsibilities
   3. Reduce my time working at my job
   4. Leave my profession entirely
   5. Hasten my plans to retire
2. Have you been impacted financially by the COVID-19 pandemic?
   1. Yes
   2. No
3. If yes, then in what form was the financial impact? (check all that apply)
   1. Furlough days
   2. Reduction/change in call money
   3. Reduction/change or cessation of matching retirement contribution
   4. Change/reduction in base salary
   5. Change/reduction in incentive pay
   6. Change/reduction in expense fund contribution
   7. Change/reduction in vacation accrual
   8. Other

Please describe other financial impacts you have experienced.

1. Have your clinical job responsibilities changed due to the COVID-19 pandemic?
   1. Yes
   2. No
2. How have your job responsibilities changed? (check all that apply)
   1. Taking care of a different patient population
   2. Working in a different unit
   3. Assuming a different role
   4. Other

Please describe how your job responsibilities have changed.

1. Have your responsibilities at home changed due to the COVID-19 pandemic?
   1. Yes
   2. No
2. How have your responsibilities at home changed? (check all that apply)
   1. Homeschooling of children
   2. Additional childcare
   3. Closures of daycare
   4. Inability of caretakers to show up
   5. Additional care of elderly family members
   6. Other

Please describe how your responsibilities at home have changed due to the COVID-19 pandemic.

1. Have you experienced the loss of a family member or friend from COVID-19?
   1. Yes
   2. No
2. Have you experienced the loss of a colleague from COVID-19?
   1. Yes
   2. No
3. Have you been infected by COVID-19?
   1. Yes
   2. No
4. Has your immediate family been hospitalized or critically ill from COVID-19?
   1. Yes
   2. No
5. Has the level of personal protective equipment (PPE) provided by your institution been adequate?
   1. Yes
   2. No
   3. Other

Please describe your thoughts on the level of PPE provided by your institution.

1. In your opinion, is your institution doing an adequate amount of testing for COVID-19 in the operating room population?
   1. Yes
   2. No
   3. Other

If other, please describe.

1. Has the COVID-19 pandemic affected your retirement plans?
   1. Yes, will retire sooner than planned
   2. Yes, will retire later than planned
   3. No, will retire on previous schedule

In an acknowledgement that we are not perfect and may have missed some important effect from COVID-19 on your work or personal life, please share that.

**Supplemental Table 2.** **Well-Being Questions**

|  |  |  |
| --- | --- | --- |
| **Question** | **Scale** | **Scorea** |
| Social isolation measure |  |  |
| Do you have as much contact as you would like with someone you feel close to, someone you can confide in? | Yes/No | No (25.1%) |
| Perceived Stress Scale |  |  |
| In the last month, how often have you felt that you were unable to control the important things in your life? | 0 (Never) to 4 (Very often) | 2 [1, 3] |
| In the last month, how often have you felt confident about your ability to handle your personal problems? | 0 (Never) to 4 (Very often) | 3 [2, 4] |
| In the last month, how often have you felt that things were going your way? | 0 (Never) to 4 (Very often) | 2 [2, 3] |
| In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? | 0 (Never) to 4 (Very often) | 1 [1, 2] |
| Job satisfaction |  |  |
| In general, how satisfied are you with your job? | 1 (Not satisfied) to 5 (Extremely satisfied) | 4 [3, 4] |
| Within the next year, how likely are you to seek a new job? | 1 (Not likely) to 5 (Extremely likely) | 1 [1, 3] |
| How likely would you be to recommend your job to a friend/colleague? | 1 (Not likely) to 5 (Extremely likely) | 4 [3, 4] |
| In retrospect, how much do you feel your job measures up to your initial expectations? | 1 (Not at all) to 5 (Very much) | 4 [3, 4] |
| PERMAH model of well-being |  |  |
| In general, how often do you feel positive? | 0 (Never) to 10 (Always) | 7 [6, 8] |
| How often do you become absorbed in what you are doing? | 0 (Never) to 10 (Always) | 7 [7, 8] |
| How satisfied are you with your personal relationships? | 0 (Not at all) to 10 (Completely) | 8 [6, 9] |
| In general, to what extent do you lead a purposeful and meaningful life? | 0 (Not at all) to 10 (Completely) | 8 [7, 9] |
| How much of the time do you feel you are making progress towards accomplishing your goals? | 0 (Never) to 10 (Always) | 7 [6, 8] |
| In general, how would you say your health is? | 0 (Terrible) to 10 (Excellent) | 8 [7, 9] |
| Depression and anxiety items |  |  |
| Over the last two weeks, have you shown little interest or pleasure in doing things? | 0 (Not at all) to 3 (Nearly every day) | 0 [0, 1] |
| Over the last two weeks, have you been feeling down, depressed, or hopeless? | 0 (Not at all) to 3 (Nearly every day) | 0 [0, 1] |
| Over the last two weeks, have you been feeling nervous, anxious, or on edge? | 0 (Not at all) to 3 (Nearly every day) | 1 [0, 1] |
| Over the last two weeks, have you felt not able to stop or control your worrying? | 0 (Not at all) to 3 (Nearly every day) | 0 [0, 1] |
| Sleep item |  |  |
| How would you rate your sleep quality over the previous month? | 0 (Very good) to 3 (Very bad) | 1 [1, 2] |
| Maslach burnout inventory |  |  |
| Do you feel burnout from your work? | 0 (Never) to 6 (Daily) | 3 [1, 4] |
| Do you feel more callous towards your patients since starting your job? | 0 (Never) to 6 (Daily) | 2 [1, 3] |

aOrdinal scores are listed as median [1st quartile, 3rd quartile]. Abbreviation: PERMAH, Positive Emotions, Engagement, Relationships, Meaning, Accomplishment, Health

**Supplemental Table 3. Comparison of Demographics for Primary and Secondary Survey Respondents**

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristica** | **Primary Survey** | **Secondary Survey** | **Overall *P*b** |
| Age (years) | 45 [37, 58] | 43 [37, 54] | 0.10 |
| Gender |  |  | 0.39 |
| Male | 266 (56.2) | 50 (50.0) |  |
| Female | 199 (42.1) | 50 (50.0) |  |
| Transgender female | 0 (0.0) | 0 (0.0) |  |
| Transgender male | 1 (0.2) | 0 (0.0) |  |
| Gender non-conforming | 0 (0.0) | 0 (0.0) |  |
| Different identity | 0 (0.0) | 0 (0.0) |  |
| Decline to state | 7 (1.5) | 0 (0.0) |  |
| Years in practice |  |  | 0.35 |
| 0-5 | 105 (22.2) | 28 (28.0) |  |
| 6-10 | 95 (20.0) | 22 (22.0) |  |
| 11-15 | 76 (16.0) | 18 (18.0) |  |
| 16-25 | 85 (17.9) | 10 (10.0) |  |
| >25 | 108 (22.8) | 22 (22.0) |  |
| Retired | 5 (1.1) | 0 (0.0) |  |
| Region of USA |  |  | 0.08 |
| Pacific time zone | 76 (16.1) | 17 (17.0) |  |
| Mountain time zone | 40 (8.5) | 11 (11.0) |  |
| Central time zone | 106 (22.5) | 20 (20.0) |  |
| Eastern time zone | 230 (48.8) | 42 (42.0) |  |
| Hawaii/Alaska | 4 (0.8) | 0 (0.0) |  |
| Outside the US | 15 (3.2) | 10 (10.0) |  |
| Practice type |  |  | 0.65 |
| Academic | 363 (77.4) | 74 (74.0) |  |
| Private | 90 (19.2) | 23 (23.0) |  |
| Other | 16 (3.4) | 3 (3.0) |  |
| Level of training |  |  | 0.72 |
| MD/DO/MBBS | 466 (98.5) | 100 (100.0) |  |
| CRNA/AA | 5 (1.1) | 0 (0.0) |  |
| Other | 2 (0.4) | 0 (0.0) |  |

aAll data are presented as count (percentage), except for age, which is presented as median [1st quartile, 3rd quartile].

bAnalysis was performed with the Wilcoxon Rank Sum test or Fisher exact test as appropriate for the distributions. *P* < 0.05 was considered statistically significant.

Abbreviations: AA, anesthesia assistant; CRNA, certified registered nurse anesthetist.

**Supplemental Table 4. Comparison Primary and Secondary Survey Responses Regarding Impact of COVID-19**

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Primary Surveya** | **Secondary Surveya** | **Overall *P*b** |
| Has the COVID-19 pandemic affected your retirement plans? |  |  | 0.68 |
| No change | 349 (73.9) | 72 (72.0) |  |
| Retire earlier | 67 (14.2) | 13 (13.0) |  |
| Retire later | 56 (11.9) | 15 (15.0) |  |
| Future job change due to COVID-19? |  |  | 0.91 |
| No change | 288 (66.5) | 67 (69.8) |  |
| Change in responsibilities | 94 (21.7) | 20 (20.8) |  |
| Reduce time working | 46 (10.6) | 9 (9.4) |  |
| Leave profession | 5 (1.2) | 0 (0.0) |  |
| In general, how often do you feel positive?c | 7 [6, 8] | 7 [6, 8] | 0.52 |
| How would you rate your sleep quality over the previous month?d | 1 [1, 2] | 1 [1, 2] | 0.72 |
| Do you feel burnout from your work?e | 3 [1, 4] | 3 [1, 4] | 0.33 |
| Do you feel more callous towards your patients since starting your job?e | 2 [1, 3] | 1 [1, 3] | 0.16 |

aOrdinal data are presented as median [1st quartile, 3rd quartile], and categorical data are presented as count (percentage).

bAnalysis was performed with the Wilcoxon Rank Sum test or Fisher exact test as appropriate for the distributions. *P* < 0.05 was considered statistically significant.

cScale: 0 (Never) to 10 (Always)

dScale: 0 (Very good) to 3 (Very bad)

eScale: 0 (Never) to 6 (Daily)