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## Deployed: One Pediatric Department's Experience of Adult Care During COVID-19

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**Abbreviations:** COVID (coronavirus disease); ED (emergency department); ICU (intensive care unit); ICCM (Institute of Critical Care Medicine); PPE (personal protective equipment); SARS CoV2 (novel coronavirus)

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Dr. Douglas, Dr. Lee, and Dr. Wilson conceptualized and designed the study, reviewed and revised the manuscript, and approved the final manuscript as submitted.

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**Abstract**

**Objective:** The number of hospitalized COVID-19 patients in March-April 2020 in our New York City hospital required increased physician staffing, including deployment of pediatricians to adult care. To improve the deployment process, we sought to understand the mindset, preparations for, and experience during deployment of pediatric faculty in our institution.

**Methods:** Faculty members of the Department of Pediatrics completed pre- and post-surveys evaluating perspectives, fears, and preparations relevant to deployment. Demographic characteristics of the faculty members were collected. Survey questions included Likert scale, multiple choice, and free-text responses. Descriptive statistics, Fisher's Exact Test and Chi-square Test were used to compare groups. Free text responses were categorized by topic. Survey responses were shared with leadership in real time and adjustments to the deployment process made.

**Results:** The pre-deployment survey was sent to 202 pediatric faculty members, with a 29% (N=59) completion rate. Of the 36 deployed faculty, 29 (81%) completed all items of the post-survey. The majority (74%, N=42) expressed discomfort with care of adults and fear and/or nervousness about deployment (61%, N=35). Most faculty (88%, N=52) prepared for deployment and cited local guidelines and published literature as helpful preparation materials (55%, N=16). Dissemination of details about schedules and role clarification prior to deployment were areas for improvement.

**Conclusion:** Pediatric faculty facing deployment to adult care have concerns about the process of deployment as well as the work itself. Specific information distributed in advance along with consistent and frequent communication may help mitigate these fears.

**Introduction:**

In March 2020, our health system prepared for a surge of hospitalized patients infected with a novel coronavirus (SARS CoV2). Units and spaces were repurposed as coronavirus disease (COVID-19) intensive care units (ICU) and wards. Pediatric emergency department (ED) visits plummeted,<sup>1</sup> elective procedures were cancelled, pediatric inpatient census decreased, and outpatient clinics converted to telemedicine visits aside from critical visits; clinics were combined to share resources.<sup>2</sup> Hospital leadership asked the Department of Pediatrics to deploy faculty, whose usual roles were temporarily reduced or eliminated, to attend on adult COVID units,<sup>3</sup> staff adult ICUs, adopt other patient-facing roles, or perform remote work related to COVID-19. Faculty were asked to complete an institutional questionnaire about their skill set and were informed that deployments would begin within 1-2 weeks.

We recognized that deployment was a unique challenge for pediatric physicians and that an opportunity existed for iterative improvement of the deployment process. Concerned about fears expressed by colleagues in a faculty meeting, we sought to survey faculty to understand their mindset, preparations for deployment, and experience of deployment. To ensure leaders understood the experience of being on the front line, we planned to analyze and share data in real time. We hoped we would identify areas where programs or interventions could be rapidly developed and launched to address needs identified in the survey. The length of time for which deployment would be needed was unknown. We planned to use the information gleaned in the surveys for ongoing improvement of the pediatric deployment process.

## **Methods:**

### **Setting**

Our institution is a 60-bed children's hospital within an 1140-bed adult hospital. The department of Pediatrics contains 202 physicians; surgical specialties, Emergency Medicine, and Neurology are in separate departments. Many faculty are researchers and nonclinical. Deployment logistics and unit assignments were organized by the Department of Medicine and Institute of Critical Care Medicine (ICCM), and faculty were assigned based on lists provided from primary departments. Upcoming deployment was announced at a Pediatric department meeting March 25, and division chiefs were tasked with submitting lists of faculty within days. Methods of constructing these lists and informing faculty of their status on the list varied by chief.

Deployment of Pediatric faculty began the first week of April. Deployment dates, times, and locations were distributed from the Department of Medicine and ICCM via email along with links to electronic materials to assist in preparation. Deployments were staggered, with emails sent approximately every 4-5 days to successive waves of deployed faculty.

### **Instrument Development**

Rapid movement from possible to actual deployment raised concerns about preparation and about individuals' emotional states. We quickly developed a survey to address these areas, in hopes of understanding current state and developing ideas for improvement over successive waves of deployment. We received permission from the Department to distribute to faculty, with the understanding that de-identified survey results would be shared with leadership to permit improved faculty support and preparation.

A 16-question pre-deployment survey and a 22-item post-survey were developed and programmed in SurveyMonkey®<sup>4</sup> (Supplement 1-2). Questions targeted areas that are difficult to

speak about (fear, anxiety, lack of confidence) and areas where the authors suspected there might be room for rapid cycle improvement (preparation materials/techniques). No pre-existing survey was used. Notes taken during faculty meetings, informal discussions with pediatric faculty at risk of deployment, and conversations within the authorship group guided question construction.

Both surveys asked demographic questions. Due to concerns that individuals would fear identification despite survey anonymity, questions on age, sex, and race were omitted. We hypothesized that fears around deployment might relate to past training in care of adults, type of pre-COVID practice setting, status as a parent, and living situation, so asked questions in these areas. Free-text questions could be skipped by the respondent, if desired. Respondents rated their comfort caring for adults on a Likert scale (very comfortable, somewhat comfortable, neither comfortable nor uncomfortable, somewhat uncomfortable, very uncomfortable), and fear or nervousness about adult care on a separate Likert scale (extremely, moderately, somewhat, a little bit, not at all). Respondents chose fears from a list, which included lack of knowledge of general adult medicine; patients dying; working with unfamiliar people; getting sick; bringing illness home; not having people to ask for help; running out of PPE; lack of knowledge about COVID; lack of control of the schedule; death; malpractice/being sued; working outside of specialty; and other. The pre-survey asked respondents about how they were preparing for deployment, and the post-survey asked what preparation was done and helpful. The post-survey contained additional questions about deployment notification, location, schedule, and invited feedback about what went well with the deployment process and areas for improvement.

Given the short timeline (4 days) between the survey creation and distribution, formal interviews and focus groups were not conducted. We piloted the questionnaire with four physicians prior to distribution and then edited questions for clarity and modified question order based on feedback.

## Survey Distribution

The pre-survey was disseminated via email on April 6, 2020 to 202 pediatric faculty. The survey was anonymous and was not linked to an email address or other identifiers; it was closed 1 week later. The post-survey was distributed via email on April 13, using blind carbon copy, to a list of deployed pediatric faculty obtained from Pediatric departmental administration. Three emails were sent during the deployment period, as the list of deployed physicians grew. At the end of the deployment process on May 8, 2020, a final reminder email was sent to all department faculty. The survey was closed May 18 (Figure 1). The initial question of the post-deployment survey screened for deployment; if the respondent had not been deployed, they exited the survey. For both surveys, the emailed link could be used once from a device. There was no incentive for participation.

## Analysis

Respondent demographic characteristics were reported as frequencies and proportions for the pre-deployment and post-deployment cohorts. Physicians were categorized as ‘Inpatient’ or ‘Outpatient’ if they worked exclusively in those settings pre-COVID and ‘Mixed’ if they worked in both settings. We compared demographic characteristics between physician groups in the pre-deployment cohort and the post-deployment cohort using a chi-square test or Fisher’s exact test, as appropriate. We compared types of fear between respondents based on living situation and physician groups using a chi-square test or Fisher’s exact test, as appropriate, in the pre-deployment cohort. Two team members reviewed free text responses and categorized topics independently; identified topics for each question were reviewed and discussed, and categories refined, until agreement was reached. Topics were not mutually exclusive and some complex

responses addressed more than one topic. Topics were reported using frequencies and proportions as well as illustrative quotations.

### **Implementation and Quality Improvement**

Within 4 days of the pre-survey's release, preliminary data were shared with leadership of the Departments of Pediatrics and Medicine, as well as with the Dean for Well-Being and Resilience for the School of Medicine. Modifications were made to onboarding materials and timing and nature of deployment notifications and assignments, a twice-weekly support group for deployed pediatric faculty began, and survey results were shared with pediatric faculty in a meeting (Figure 1).

This project was approved as Quality Improvement by the Pediatric Performance Committee of our institution.

### **Results:**

#### **General**

Of the 202 faculty who received the pre-survey link, 59 (29%) responded. At the time of completion, 21 (36%) had been notified of imminent deployment. Thirty-four (94%) of the 36 deployed physicians initiated the post-survey and 29 (81%) completed it. Tables 1 and 2 include demographic characteristics for those who completed the pre- and post-survey.

#### **Pre-survey**

There were no significant differences between inpatient, outpatient, or mixed physicians in terms of relationship status, adult training experience, or parent status; however, inpatient providers were more likely to live alone ( $p = 0.01$ , Table 1). Sixty-one percent ( $N=35$ ) of respondents described themselves as either “extremely” (23%,  $N=13$ ) or “moderately afraid or nervous”



(39%, N=22) about being called to adult care. Seventy-four percent (N=42) of respondents reported feeling either “very” or “somewhat” uncomfortable with care of adults (Table 3). The most common responses to the question “I am fearful of/nervous about” were lack of medical knowledge to care for adults, bringing illness home, and personal illness or death (Table 3). Respondents who lived with other people were more likely to fear bringing the illness home compared to those who lived alone (78%, N=40 vs 0%,  $p < 0.001$ ). For all other fears, there was no association found with living situation. Outpatient providers were more likely to be worried about inadequate medical knowledge ( $p = 0.02$ ), while inpatient providers were more likely to worry about bringing illness home ( $p=0.02$ ). There was no association found with provider type and other fears. Forty-seven respondents answered the free-text item “My biggest fear is...”. Common themes were personal illness or death (36%, N=17), family illness or death (34%, N=16), lack of medical knowledge (34%, N=16), and causing patient harm (21%, N=10) (Table 4).

Preparation strategies in advance of deployment included reading literature (54%, N=32) or institutional guidelines (50%, N=30) about COVID, talking with providers on COVID units (17%, N=15), reviewing cardiopulmonary resuscitation and life support (17%, N=10), or online training modules (12%, N=8). Seven (12%) individuals stated they had done nothing to prepare, citing lack of knowledge about how to prepare, uncertainty about being deployed, lack of time, and fear.

Thirty-one of the 59 respondents answered the prompt, “One thing my leaders could do today to make me feel more prepared for deployment is...” Identified topics were definition of roles and duties (29%, N=9), provision of details about the work schedule (23%, N=7), and medical resources and preparation materials (16%, N=5).

### Post-survey

Thirty-six of the Department's 202 faculty (18%) were deployed; 34 (94%) completed all or part of the post-survey. The majority (88%, N=30) had no training in adult medicine beyond medical school (Table 2). Of the 29 respondents who provided information about deployment location, 90% (N=26) were deployed to direct patient care roles, with 45% (N=13) sent to medical floors, 31% (N=9) to ICUs, and 14% (N=4) assigned alternate patient-facing roles (e.g. inpatient pediatrics, palliative care). Of inpatient physician respondents, 64% (N=7) served in ICU and 27% (N=3) served on medical floors. Only 1 mixed physician was deployed to ICU while 4 (67%) went to medical floors. No outpatient physicians were deployed to ICU care; 3 (43%) served on medical floors. Outpatient physicians were most likely to be deployed in alternate roles (p=0.02). ICU deployees had a median of 6 days (range 2-40) between notification and actual deployment, while floor deployees had a median of 3 days (range 1-11).

Twenty-nine people provided information about fears and preparations. After deployment, 66% (N=19) felt that they were less afraid/nervous of working in adult care, with similar fears to those reported in the pre-survey, however more respondents in the post-survey reported fear of working with unfamiliar people (Table 3). The most valuable deployment preparation strategies reported were reviewing local documents (55%, N=16), reading general literature (55%, N=16) about COVID, shadowing (38%, N=11), and talking with providers working on COVID units (34%, N=10). The most common themes of the 13 responses to the free-text question "the one thing I wish I had been told beforehand is..." were role definition (38%, N=5) and instructions for preparation (38%, N=5). The question "one thing that went well was..." yielded a theme of interdisciplinary teamwork (59% of 22 respondents, N=13); one respondent commented "the unit worked in collaboration", while another stated, "It...was inspiring. I hope the cross-silo

experience and interaction serves as a model for the future”. Scheduling, continuity of patients and teams, role definition, structure of the deployment process, and communication were commonly identified areas of improvement. Respondents desired a “better understanding” of the plan and felt that “knowing the specific details” about the deployment would have helped. One simply wrote, “Communication was poor”.

### **Discussion:**

At our institution, pediatricians changed their practice to care for hospitalized adults with COVID-19. Unlike other institutions,<sup>5</sup> our faculty did not “surge-in-place,” but deployed into existing adult units. Most deployed physicians spent some or all of their time in an inpatient setting and had little or no prior adult training. Faculty were fearful and nervous about deployment both before and after experiencing it; concrete steps in preparation, communication, and support can be taken to assist pediatricians in caring for adults during a pandemic. Concern about practicing outside one’s expertise drives increased anxiety in health care professionals<sup>6</sup>, and our data reflected this. Extreme discomfort was lower post-deployment; we surmise that deployed faculty were more comfortable with adult care after actual exposure. Institutions with more pediatric faculty with adult training and experience may factor this in to match deployment needs. Understanding competency concerns and addressing them explicitly is important for leaders contemplating an interdisciplinary approach of mixed adult and pediatric teams such as our institution employed.

The fears of personal illness and death we observed are similar to data reported from Toronto during the SARS outbreak, in which 65% of surveyed hospital employees reported concern about their personal health,<sup>7</sup> and have been reported in pediatric ED workers during this pandemic<sup>1, 8</sup> as

well as internal medicine hospitalists.<sup>9</sup> Associations between fearing illness or death of family members and living with others has been previously described<sup>7</sup>, and has been prevalent in other healthcare workers during the COVID-19 pandemic.<sup>1,6,10</sup> Fears about inadequate PPE both before and after deployment could relate to our extended use and reuse protocols; early messaging about a reliable PPE supply might mitigate this fear.<sup>11</sup> It is possible that PPE concerns contributed to fears of personal illness and death as well as infection of others; little change in fears after deployment could relate to the infectiousness of the virus and the high mortality rate seen in hospitals at the time.<sup>12</sup> Leadership recognition of these fears is important and may help deployed individuals feel supported.

Deployment in our institution was rapid, with little advance notice for many, and multiple respondents reflected that communication and preparation needed improvement. Confusion about roles and scheduling, and fears of working with unfamiliar people highlight the importance of consistency in scheduling and team assignments and of frequent communication about logistics. Information about COVID-specific institutional practices was seen as helpful and useful; other institutions have described buddy systems and “just in time” adult medicine training modules which merit consideration<sup>13</sup>, as does sharing of resources such as the one-page documents on common adult medicine topics developed by the Pediatric Overflow Planning Contingency Response Network (POPCoRN).<sup>14</sup>

Front-line COVID-19 health care workers are at risk of emotional distress, including symptoms of depression and anxiety<sup>9,15</sup>, and our data raise concern about this in our faculty. Our health system had resources available for staff and faculty during the COVID-19 pandemic, including childcare, hotlines, virtual support groups, and mindfulness classes<sup>16</sup>; other institutions have provided similar services<sup>1,8</sup> in recognition that creating multiple ways to support staff in stressful

times is important and contributes to greater resilience.<sup>17-19</sup> It is unclear the extent to which survey responses may have differed had these resources not been available. Positive descriptions of camaraderie experienced by employees indicates the value of creating a culture of teamwork with an “all hands on deck” mentality. Merely doing and sharing the survey results may have created connection between department members in a time when faculty were dispersed, social distancing, and often living apart from their families.<sup>20-22</sup> Institutions pondering a deployment model akin to ours should plan to provide opportunities for connection for those who are “sent out” of their work location and community.

### **Future steps**

In our institution, recognition of the key role of communication led to a structured plan of regular departmental and hospital meetings and announcements. Partnering with deployment sites to understand details about schedules and workflows, identifying areas of medical knowledge requiring training, and disseminating information to faculty pre-deployment is essential. This should be done as far in advance of a second deployment as feasible to aid in avoiding ambiguity about roles and responsibilities.<sup>23</sup> Doing so may reduce stress, anxiety, and risk of emotional trauma in those who are deployed.<sup>24</sup> In addition to publicizing and encouraging use of hospital wellness resources, we plan to institute a departmental support group at announcement of a future deployment, rather than waiting until after deployment has begun. Avenues for individuals to process their experiences, manage stress, and explore their feelings can build resilience at an organizational level.<sup>18,19,25</sup>

### **Limitations**

This was a single institution study, and the experiences of our faculty may not resemble those of other institutions or of non-pediatric faculty. In order to maintain anonymity within our

department, detailed demographic information was not collected, limiting our ability to detect associations related to sex, race, ethnicity, or age. The pre-survey response rate of 29% was low, which we attribute to use of a faculty list-serv which contained many individuals who may have felt themselves unlikely to be deployed (eg, non-clinical researchers) and a 7-day time frame in which the survey was open. Thus, the pre-deployment survey results may not reflect the views of the entire faculty. The post-deployment response rate was 81%, but sample size was small. Individual responses to the pre and post surveys were not linked, limiting our ability to make direct comparisons. The timeline for survey development and launch was short, and we were not able to engage in robust pilot testing, focus groups, and other typical survey development processes that might have further improved the survey tools.

### **Conclusion:**

Pediatric faculty facing deployment to adult care have fears and concerns about the process of deployment as well as the work itself. Detailed information distributed in advance along with consistent and frequent communication and acknowledgement of the emotional strain of the work may help mitigate these fears. However, many fears stem from the discomfort of working outside of one's expertise and may not be modifiable. The lessons learned from the data gathered during this intense professional and personal experience can inform future deployment models.

## References

1. Walker, D.M. and V.R. Tolentino, *COVID-19: the effects on the practice of pediatric emergency medicine*. *Pediatr Emerg Med Pract*, 2020. **17**(Suppl 6-3): p. 1-15.
2. Mehotra, A., et al. *The impact of the COVID-19 pandemic on outpatient visits: practices are adapting to the new normal*. *Commonwealth Fund*. Commonwealth Fund; June 25, 2020. [Available from: <https://www.commonwealthfund.org/publications/2020/jun/impact-covid-19-pandemic-outpatient-visits-practices-adapting-new-normal>].
3. Kim, M.K., et al., *A Primer for Clinician Deployment to the Medicine Floors from an Epicenter of Covid-19*. *NEJM Catalyst Innovations in Care Delivery*, 2020: p. 10.1056/CAT.20.0180.
4. SurveyMonkey Inc.; Available from: San Mateo, California, USA. [www.surveymonkey.com](http://www.surveymonkey.com).
5. Philips, K., et al., *Rapid Implementation of an Adult Coronavirus Disease 2019 Unit in a Children's Hospital*. *The Journal of pediatrics*, 2020. **222**: p. 22-27.
6. Shanafelt, T., J. Ripp, and M. Trockel, *Understanding and Addressing Sources of Anxiety Among Health Care Professionals During the COVID-19 Pandemic*. *Jama*, 2020. **323**(21): p. 2133-2134.
7. Nickell, L.A., et al., *Psychosocial effects of SARS on hospital staff: survey of a large tertiary care institution*. *Cmaj*, 2004. **170**(5): p. 793-8.
8. Schulte, E.E., C.A. Bernstein, and M.D. Cabana, *Addressing Faculty Emotional Responses during the Coronavirus 2019 Pandemic*. *The Journal of pediatrics*, 2020. **222**: p. 13-14.
9. Dugani, S.B., et al., *Psychological wellness of internal medicine hospitalists during the COVID-19 pandemic*. *Hospital practice (1995)*, 2020: p. 1-9.
10. Maunder, R., et al., *The immediate psychological and occupational impact of the 2003 SARS outbreak in a teaching hospital*. *CMAJ*, 2003. **168**(10): p. 1245-51.
11. Barba, R., et al., *Managing People, Roles, and Resources During Covid-19 Surge*. *Nejm Catalyst Innovations in Care Delivery*, 2020: p. 10.1056/CAT.20.0152.
12. Thompson, C.N., et al., *COVID-19 Outbreak - New York City, February 29-June 1, 2020*. *MMWR Morb Mortal Wkly Rep*, 2020. **69**(46): p. 1725-1729.
13. Kumaraiah, D., et al., *Innovative ICU Physician Care Models: Covid-19 Pandemic at NewYork-Presbyterian*. *NEJM Catalyst Innovations in Care Delivery*, 2020: p. 10.1056/CAT.20.0158.
14. Pediatric Overflow Planning Contingency Response Network (POPCoRN). *Educational Resources*. Available from: <https://www.popcornetwork.org/educational-materials-main-menu>.
15. Lai, J., et al., *Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019*. *JAMA Netw Open*, 2020. **3**(3): p. e203976.
16. Ripp, J., L. Peccoralo, and D. Charney, *Attending to the Emotional Well-Being of the Health Care Workforce in a New York City Health System During the COVID-19 Pandemic*. *Acad Med*, 2020. **95**(8): p. 1136-1139.
17. Wu, A.W., C. Connors, and G.S. Everly, Jr., *COVID-19: Peer Support and Crisis Communication Strategies to Promote Institutional Resilience*. *Ann Intern Med*, 2020. **172**(12): p. 822-823.

18. Shanafelt, T., et al., *Caring for Health Care Workers During Crisis: Creating a Resilient Organization*. 2020, American Medical Association.
19. Dzau, V.J., D. Kirch, and T. Nasca, *Preventing a Parallel Pandemic - A National Strategy to Protect Clinicians' Well-Being*. *N Engl J Med*, 2020. **383**(6): p. 513-515.
20. Guarino, B. *Nurses, doctors take extreme precautions to avoid infecting family members*. *The Washington Post*. April 16, 2020; Available from: <https://www.washingtonpost.com/health/2020/04/16/nurses-doctors-are-taking-extreme-precautions-avoid-bringing-coronavirus-home/>.
21. Fichtel, C. and S. Kaufman. *Fearing COVID-19 spread to families, health care workers self-isolate at home*. *NBC News*. March 31, 2020; Available from: <https://www.nbcnews.com/health/health-news/fearing-covid-19-spread-families-health-care-workers-self-isolate-n1171726>.
22. Alanez, T. *Health care workers live apart to protect families*. *The Boston Globe*. May 17, 2020; Available from: <https://www.bostonglobe.com/2020/05/17/nation/health-care-workers-live-apart-protect-families/>.
23. Kerrisey, M.J. and S.J. Singer, *Leading frontline COVID-19 teams: Research-informed strategies*. *NEJM Catalyst Innovations in Care Delivery*, 2020: p. 10.1056/CAT.20.0192.
24. Greenberg, N., et al., *Managing mental health challenges faced by healthcare workers during covid-19 pandemic*. *Bmj*, 2020. **368**: p. m1211.
25. Rosenberg, A.R., *Cultivating Deliberate Resilience During the Coronavirus Disease 2019 Pandemic*. *JAMA Pediatr*, 2020. **174**(9): p. 817-818.



**Table 1: Pre-Deployment Demographic Characteristics by Physician Primary Pre-Pandemic Workplace**

	Total N = 59	Inpatient* N =13	Mixed* N =18	Outpatient* N =21	p-value <sup>†</sup>
	N (%)	N (%)	N (%)	N (%)	
Relationship Status					0.09
Married/Partnered	47 (80)	8 (62)	16 (89)	18 (86)	
Single	10 (17)	5 (38)	1 (5)	2 (9)	
Prefer not to say/Other	2 (3)	0 (0)	1 (5)	1 (5)	
Have Children <18					0.40
No	26 (44)	8 (62)	8 (44)	8 (38)	
Yes	33 (56)	5 (38)	10 (56)	13 (62)	
Living Situation					
Alone	8 (14)	5 (39)	1 (6)	1 (5)	0.01
With child/ children <18	32 (54)	5 (39)	9 (50)	13 (62)	0.40
With adult/s aged 18 - 65	32 (54)	7 (54)	12 (67)	12 (57)	0.74
With adult/s >65	7 (12)	0 (0)	2 (11)	4 (19)	0.26
Prefer not to say	0 (0)	0 (0)	0 (0)	0 (0)	---
Other	1 (2)	0 (0)	0 (0)	1 (5)	---
Adult medicine training/experience					>0.99
No	54 (92)	12 (92)	17 (94)	20 (95)	
Yes	5 (8)	1 (8)	1 (6)	1 (5)	

Living situations and training experiences (for those who answered Yes) are not mutually exclusive.

\*Not all respondents answered questions about type of practice permitting categorization.

<sup>†</sup>Comparison of Inpatient, Mixed, and Outpatient

**Table 2: Post-Deployment Demographic Characteristics by Physician Primary Pre-Pandemic Workplace**

	Total N =34	Inpatient* N = 15	Mixed* N = 7	Outpatient* N = 7	p-value <sup>†</sup>
	N (%)	N (%)	N (%)	N (%)	
Relationship Status					0.28
Married/Partnered	25 (74)	10 (67)	5 (71)	7 (100)	
Single	9 (26)	5 (33)	2 (29)	0 (0)	
Prefer not to say/Other	0 (0)	--	--	--	
Have Children <18					0.10
No	19 (56)	8 (53)	6 (86)	2 (29)	
Yes	15 (44)	7 (47)	1 (14)	5 (71)	
Living Situation					
Alone	8 (24)	5 (33)	1 (14)	0 (0)	0.25
With child/ children <18	15 (44)	7 (47)	1 (14)	5 (71)	0.10
With adult/s 18- 65	18 (53)	6 (40)	5 (71)	5 (71)	0.37
With adult/s >65	0 (0)	0 (0)	0 (0)	0 (0)	---
Prefer not to say	0 (0)	0 (0)	0 (0)	0 (0)	---
Other	0 (0)	0 (0)	0 (0)	0 (0)	---
Adult medicine training/experience					>0.99
No	30 (88)	13 (87)	6(86)	7 (100)	
Yes	4 (12)	2 (13)	1 (14)	0 (0)	

Living situations and training experiences (for those who answered Yes) are not mutually exclusive.

\*Not all respondents answered questions about type of practice permitting categorization.

<sup>†</sup>Comparison of Inpatient, Mixed, and Outpatient

**Table 3: Pediatrician Comfort with Adult Care and Specific Fears about Deployment**

	Pre-Deployment N = 59	Post-Deployment N = 29
	N (%)	N (%)
Baseline comfort with adult care		
Very uncomfortable	20** (35)	5 (17)
Somewhat uncomfortable	22** (39)	17 (59)
Neither comfortable nor uncomfortable	10** (17)	3 (10)
Somewhat comfortable	4** (7)	4 (14)
Very comfortable	1** (2)	0 (0)
I am fearful of/nervous about <sup>†</sup> :		
Not knowing enough general adult medicine	49 (83)	23 (79)
Bringing illness home to my family	40 (68)	20 (69)
Working outside my specialty	35 (59)	17 (59)
Getting sick myself	32 (54)	16 (55)
Running out of PPE	27 (46)	10 (35)
Death - my own	23 (39)	8 (28)
Patients dying	20 (34)	9 (31)
Not having control of my schedule	18 (31)	6 (21)
Not knowing enough about COVID	15 (25)	9 (31)
Not having people to ask for help	14 (24)	7 (24)
Working with unfamiliar people	13 (22)	15 (52)
Malpractice/being sued	7 (12)	2 (7)

\*\* 57 of 59 answered this question

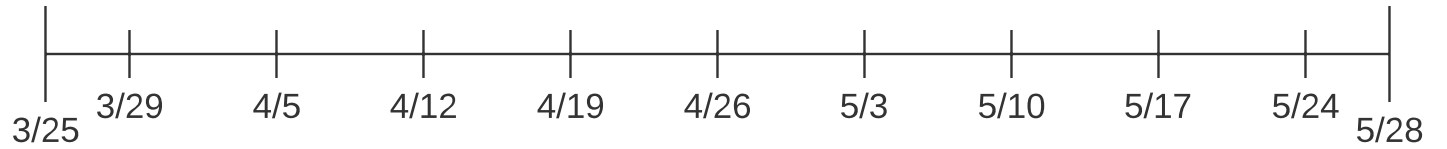
<sup>†</sup>Respondents could choose multiple answers.

**Table 4: Frequency of Topics Identified from Free-Text Question “My biggest fear is...”**

Topic	Pre-Deployment N = 47	Post-Deployment N = 20	Illustrative responses
	N (%)	N (%)	
Personal Illness or Death	17 (36)	5 (25)	Respondent A: My own death. Respondent B: Not being able to care for my kids if I get sick or die.
Family Illness or Death	16 (34)	6 (30)	Respondent C: Bringing COVID to my family. Respondent D: Killing my husband with health issues which put him at high risk.
Other Family Concern	5 (11)	3 (15)	Respondent E: That my kids will get too used to me not living at home.
Medical Knowledge	16 (34)	5 (25)	Respondent F: Not knowing how to manage adults' underlying medical conditions.
Patient Harm	10 (21)	6 (30)	Respondent G: Harming a patient because I am practicing out of my area of training and expertise.
Inadequacy	9 (19)	6 (30)	Respondent H: Not being able to handle it.

# Deployment Timeline

## March - May 2020



● Indicates an event or occurrence

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