



The 2020 Pandemic

Snapshot of the Impact of the COVID-19 Pandemic on Academic Anesthesiology Departments' Staffing and Compensation

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The COVID-19 pandemic crisis has disrupted all aspects of our lives from personal to professional. Although there have been anecdotal accounts of staffing changes (e.g., layoffs, early retirements) and compensation changes throughout our specialty, we wanted to determine the impact of the crisis on academic anesthesiology departments.

Over a two-week period in August (August 7-21, 2020), we surveyed all academic chairs who are members of the Association of Academic Anesthesiology Chairs (AAAC, www.saaapm.org/aaac). The short survey was made up of 10 questions as shown in Table 1. The survey had IRB exemption.

Out of the 118 members of AAAC, 51 departments (43%) participated in the survey representing all regions of the United States (Table 2). These 51 departments reported information on a total of 4,130 anesthesiology faculty, 553 fellows, 2,760 residents, and 3,816 non-physician anesthesia clinicians (NPAC = nurse anesthetists + anesthesiologist assistants).

Impact on staffing: Early retirement, permanent disability, permanent reassignment to non-clinical assignments (question 2)

Throughout the pandemic, persons at high risk for morbidity were identified by age, existing medical comorbidity, or preg-



nancy. During a local surge in infections, especially early in the pandemic, many departments chose to temporarily reassign their high-risk clinicians to non-clinical assignments. But as we have learned, this crisis is not a short-term event and the risk of exposure and infection will continue to be an occupational risk, likely at least through mid to late 2021. Because of this risk, some clinicians have chosen to no longer provide direct clinical care. From the survey results, we can quantify

the impact to academic anesthesiology departments. No residents or fellows left clinical practice due to the crisis. On the other hand, a total of 54 clinicians left clinical practice permanently due to the crisis, with 28 (0.7%) faculty and 26 (0.7%) NPAC (Table 3). Most clinicians chose early retirement (20 faculty and 22 NPAC), with some taking permanent disability (seven faculty and four NPAC) and one faculty permanently reassigned to non-clinical work only.

It is important to note that the majority of departments did not have any clinicians leave clinical practice. For faculty who left clinical practice, 17 of 51 (33%) departments had at least one faculty member. The range of number of faculty was one to three, but because of different sizes of departments, the percentage of faculty ranged from 0.7% to 5.9% (median 1.6%). In contrast, the loss of NPAC from clinical practice was more concentrated to six of 51 (12%) departments. The range was one to eight, but again because of the different sizes, the percentage of NPAC ranged from 0.8% to 11.1% (median 1.8%).

Impact on compensation: Furloughs, forced vacation, pay cuts (questions 3-5)

The health care industry has not been immune to the economic downturn due to the COVID-19 crisis. For a period of time, elective surgical cases were not done in response, and outpatient health



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care operations were reconfigured. Many health systems and anesthesiology departments saw a reduction in revenue while trying to maintain staffing levels (and costs). Anecdotally, we heard that many academic medical centers and medical schools were choosing forced vacation days in lieu of furloughs (layoffs) or pay cuts. Hence, we surveyed all three of these options.

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Building Rapport

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wound care, nutritional requirements, or learn about antibiotic infusions at home (*J Hosp Med* 2020;15:437-9). These activities require caregiver support and may also increase the risk of readmission if it is unsupervised.

One of the strategies proposed to improve communication between caregivers and family members is to hold virtual meetings with an identified contact. Ideally, this person is designated as the durable power of attorney regarding the patient's

health care (*J Hosp Med* 2020;15:437-9). This person will in turn be responsible for contacting the rest of the family and to share information about the patient's progress. Family dynamics are often more subtle than this, and cross-cultural problems arise (*J Hosp Med* 2020;15:437-9; *Patient Educ Couns* 2020;103:1067-9). Furthermore, accurate information is dependent on this family member's ability to fully understand the patient's progress and to transmit the information effectively to other family members. Since the physicians are unable to spend time communicating with other members not present at

bedside, this complex information can be overwhelming (*J Hosp Med* 2020;15:437-9). Concerns are therefore raised about effective communication of the patient's current status, and it can create further challenges in establishing rapport. Some care teams may decide to call the family during morning rounds so the family member can participate. This can be effective for rapport and team-building when this interval events occurs. The process is unfortunately dependent on the ability of the family member to be available at rounds time, which is very difficult to assess (*J Hosp Med* 2020;15:437-9; *Patient*

Educ Couns 2020;103:1067-9). The many moments between official rounds – the handshake, the informal update, the excitement of progress, are all missed. They are filtered out in the efficiency and decorum of morning rounds.

The current pandemic has caused significant challenges for communicating with family regarding patient's critical illness, their current status, future care plans, and goals of care. The main goal of ICU and perioperative care still remains healing and compassionate care. But newer strategies are needed for effective communication and building rapport with family members. ■

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Furloughs or layoffs of any type of clinician were not common, with only four departments (8%) reporting any; two furloughing both faculty and NPAC, one only NPAC, and one only faculty.

In contrast, 25 (49%) departments reported forced vacation days (seven departments), pay cuts (13 departments), or both (five departments). Vacation days were hard to quantify despite trying to clarify with respondents because of the different implementation methods used. In general, for most departments that had forced vacation days, the range of days was five to 10 (one to two weeks). By using forced vacation days, their clinicians did not see a decrease in compensation despite not working, but since vacation time is a paid benefit if unused, it was a pay cut. In addition, 18 (36%) departments had some sort of pay cut, with all 18 reporting pay cuts for faculty and 10 of the 18 reporting pay cuts for NPAC. Only one department reported cutting pay to residents and fellows. The majority of cuts were <10% of total compensation at the time of the survey.

Impact on spending: Departmental or professional development (questions 8-9)

Over 75% (40 departments) reported that department spending was reduced/restricted or frozen, with 27 (53%) having funds frozen, 11 (22%) reduced/restricted, and 2 (4%) both. For individual faculty's funds to spend on professional development, over 50% (27 departments) reported that funds were reduced/restricted or frozen with 11 (22%) frozen, 14 (27%) reduced/restricted, and 2 (4%) both.

Impact on hiring and job offers (questions 6-7)

Only six departments (12%) reported cancelling job offers to at least one new faculty, and half of those departments also cancelled new hires for NPAC. For graduating residents, 11 departments (22%) reported at least one resident/fellow lost a job offer, with almost all of them in private practice or hospital employment groups.

COVID-positive clinicians (question 10)

Forty-nine departments reported information of the number of COVID-positive tests in clinicians as of time of the survey (two departments did not provide any data). Forty-one of the 49 departments (84%) reported at least one clinician who tested positive. In reviewing the data, there were six departments that were outliers in the COVID-positive rate as defined as >10% rate in at least one type of clinicians. Five of the six represented departments in the regions of the March 2020 surge and one department had an almost 20% COVID-positive rate in residents due to a non-departmental sponsored social event. In looking at the other 43 departments, the overall positive rate among clinicians is 1.7% (157 out of

Table 1: Survey Questions on Impact to Academic Anesthesiology Departments		
#	Question	Broken out by type of clinician
1	Contact information	
2	Retire early, permanent disability, permanent reassignment	Yes
3	Furloughed or laid-off completely	Yes
4	Forced to take vacation days	Yes
5	Cut in direct compensation	Yes
6	Cancel new hire offers	Yes
7	Graduating residents having job offers cancelled	
8	Professional development funds	
9	Departmental non-salary spending	
10	Covid positive tests	Yes

The full survey can be viewed at <https://bit.ly/2Se5AR2.s>.

9,739 clinicians): 1.5% faculty, 1.1% fellows, 2.1% residents, and 1.7% NPAC. The range of COVID-positive varied tremendously by department as shown in Table 4.

Although this survey was not definitive, it provides us a snapshot of the impact of the COVID-19 crisis as of mid-August 2020. Academic departments have lost 0.7% of faculty and NPAC due to early retirement or permanent disability due to the crisis. Although there was a decrease in compensation and spending, there were few layoffs. Finally, the low COVID-positive rate among clinicians after the initial surge is less than the community reported rate, but because there is more comprehensive surveillance of health care workers, it probably represents a similar prevalence of the virus as there is in the actual community. ■

Table 2: Academic Departments Participating and Number of Clinicians							
Region	Responding Departments	Total Possible Departments	Response Rate	Number of Faculty	Number of Fellows	Number of Residents	Number of NPAC
New England/Mid Atlantic	16	43	37%	1,015	121	527	1,118
Midwest	10	26	38%	1,258	150	870	1,186
South	13	29	45%	882	142	655	984
West	12	20	60%	976	140	708	528
All	51	118	43%	4,130	553	2,760	3,816

Survey done from August 7-21, 2020, of the members of the Association of Academic Anesthesia Chairs (AAAC). NPAC = non-physician anesthesia clinicians = nurse anesthetists + anesthesiologist assistants.

Table 3: Clinicians Who Left Clinical Practice Due to the COVID-19 Crisis					
	All	Faculty	Fellows	Residents	NPAC
# of departments with at least 1 clinician	17	17	0	0	6
N (all clinicians)	11,259	4,130	553	2,760	3,816
# left clinical practice (%)	54 (0.5%)	28 (0.7%)	0	0	26 (0.7%)
Early retirement	42 (0.4%)	20 (0.5%)	0	0	22 (0.6%)
Permanent disability	11 (0.1%)	7 (0.2%)	0	0	4 (0.1%)
Permanent reassignment to nonclinical work	1 (0.01%)	1 (0.02%)	0	0	0

Out of the 51 participating departments, 17 had at least one clinician leave clinical practice. Overall, almost 1% of faculty and 1% of NPAC left clinical practice. No fellows or residents left clinical practice. NPAC = non-physician anesthesia clinician = nurse anesthetist + anesthesiologist assistant.

Table 4: Cumulative Tests at Time of Survey					
N=43	Any Clinician Positive	Faculty	Fellow	Resident	NPAC
Departments	35	35	34	34	35
Total Clinic Positive	156	50	5	44	57
All Possible Clinicians	9,466	3,448	448	2,143	3,427
% of Clinicians Positive	1.6%	1.5%	1.1%	2.1%	1.7%
% Positive Per Department					
Mean ± SD	1.7% ± 1.6%	1.6% ± 2.1%	0.5% ± 1.8%	2.1% ± 2.7%	1.7% ± 2.9%
Median (min-max)	1.3% (0.0% - 5.7%)	0.8% (0.0% - 7.1%)	0.0% (0.0% - 8.7%)	1.1% (0.0% - 9.5%)	0.0% (0.0% - 8.3%)

Of the 51 departments that participated in the survey, 49 departments reported number of positive tests with two departments not providing any data. Six departments were identified as outliers with >10% positive rate among any type of clinicians. Five of these were in March 2020. Surge regions and one had almost 20% positive for residents due to a non-departmental social event.