virginia society of anesthesiologists

UPDATE

SUMMER 2020:

The Aftermath: Lessons Learned From a Pandemic

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Feature Article

Anesthesiologists Demonstrate Resilience After a "Knockout"

By Danny Theodore, MD
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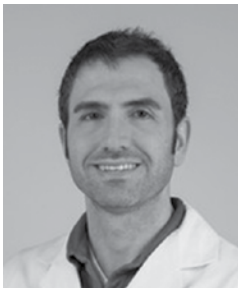

Dr. Danny Theodore

Mike Tyson once said "Everyone has a plan until they get punched in the face." That punch in the face came in the form of COVID-19. The aftermath of what this pandemic has done to physicians and the healthcare system has not yet fully been seen.

The immediate effects have made us rethink our staffing models, financial planning, and resource needs. Across the news and social media, physicians voiced safety concerns for all healthcare professionals. Despite our hard efforts, supplies of personal protective equipment (PPE) dwindled and we were met with challenges no one ever expected. We saw a surge in the need for resources that left anesthesiologists and frontline physicians rapidly scrambling for supplies to continue working safely.

Out of this came collaboration and resilience. The human spirit rose to new levels and our innate creativity shined. Private entities and business came to aide. The general public rallied for healthcare workers. Masks were donated, 3D printing of face shields were produced, and intubation boxes were manufactured, all because humanity came together in a time of loss. Healthcare entities and federal agencies coordinated efforts to obtain the necessary supplies yet, around the country, we saw hospital and healthcare workers still short the necessary PPE.

Beyond PPE supplies, anesthesiologists were impacted by ventilator shortages and anesthesia drug shortages. COVID-19 patients require longer ventilation management, higher doses of sedatives, analgesics, and paralytic drugs. Drugs that we used for the majority of cases such as propofol, fentanyl, midazolam, and paralytic drugs were now in short supply. Anesthesiologists were vigilant and resourceful and continued to provide safe and effective care. Our years of training allowed us to support these surgical services with other drug combinations, regional, and neuraxial anesthesia techniques.

In an effort to minimize exposure, hospitals deployed alternative physical locations to treat COVID-19 patients. School gyms, tents, and temporary buildings were utilized to increase capacity in order to handle the surge. Anesthesiologists were asked to staff these areas. Our perioperative services now shifted to critical care services.

In the academic arena, residents and fellows were told not to take care of COVID-19 patients. Health risks, low case volumes, and PPE shortage left anesthesia residents missing out on training opportunities. This was a disservice to our future anesthesiologists as COVID-19 is our new norm, and they will be confronted with this virus after residency. The better option might have been to train our residents how safely and properly to take care of patients in the new COVID-19 era.

The financial impact of this pandemic on physicians and hospitals has been immense and far-reaching. The federal government stepped in to provide financial relief to physicians, but these efforts - including the Coronavirus Aid, Relief, and Economic Security ('CARES') Act, and Federal Provider Relief Fund - barely scraped the surface.

None of those measures truly addressed the financial distress all physicians are encountering, and will continue to encounter, months and years from now. Private groups furloughed anesthesiologists, CRNAs, and Anesthesia Assistants. Large health systems and hospitals received millions, but none of that trickled down to physicians.

Medical Group Management Association (MGMA), run by Tony Mira, surveyed anesthesia practices across the country. Ninety-seven percent of these physician practices experienced a negative financial impact. A 60% average decrease in patient volume, and 55% average decrease in revenue was seen since the beginning of this pandemic. More

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THE AFTERMATH: Lessons Learned From a Pandemic

vsa virginia society of anesthesiologists UPDATE

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The ***VSA Update*** newsletter is the publication of the Virginia Society of Anesthesiologists, Inc. It is published quarterly. In January, a special annual legislative issue is published. The VSA encourages physicians to submit announcements of changes in professional status including name changes, mergers, retirements, and additions to their groups, as well as notices of illness or death. Anecdotes of experiences with carriers, hospital administration, patient complaints, or risk management issues may be useful to share with your colleagues. Editorial comment in italics may, on occasion, accompany articles. Letters to the editor, news and comments are welcome and should be directed to: Brooke Trainer, MD • brookealbright@gmail.com.

President's Message

In the Aftermath, Our Work Must Go On

By Jeffrey Green, MD, FASA
VSA President

Dr. Jeffrey A. Green
VSA President

In the last issue of the newsletter, I suggested that physician anesthesiologists would rise to the occasion. What we have done is nothing short of heroic. Despite the personal risks, despite the lack of equipment and PPE, despite drug shortages, despite the economic hardship, we persevered in delivering care to our patients.

We stepped up when others wouldn't. We have demonstrated our value to our hospitals and health systems. We will continue to do what's right for our patients as long as this pandemic continues.

In this issue of the newsletter, you will read stories of resilience, adaptability and ingenuity. Throughout the pandemic, anesthesiologists across the Commonwealth relied on expert training and experience to provide superior care to patients despite the risks. This situation was difficult for all of us, but there is a light at the end of the tunnel and we should all be poised to enter the recovery phase and continue to lead in our communities. In this issue, we will highlight some COVID success stories, personal accounts, and heroic actions.

Throughout this experience, our work to advocate for ourselves and our specialty has and will continue to go on. I would argue, that there has never been a better time for anesthesiologists to demonstrate to our patients, our colleagues, administrators, the public, and lawmakers who we are and what we do. It is our job to explain what COVID means to the specialty of anesthesiology and why our background, training and experience is vital to this fight.

On your behalf, your VSA leadership continuously explained our role and how it was affected by COVID through phone calls, virtual meetings and other communication with our elected leaders and government agencies, emphasizing our "can do" approach and proposing solutions to problems.

Despite what is going on back at home, every year the ASA Legislative Conference is an opportunity to organize and educate ourselves on the key federal issues impacting our specialty. After the conference, we meet with our legislators to advocate for anesthesiology. During the pandemic, this year the ASA legislative conference became a virtual meeting, so your VSA leadership was not able to represent you personally with our legislators in Washington.

However, many VSA members attended the conference remotely on Saturday May 30, and learned about the important federal advocacy issues we are facing. COVID was front and center in our legislative priorities in two important ways. First, we advocated for increased Medicare payment for anesthesiologists taking care of COVID patients.

Did you know that hospitals receive a 20% bonus payment from Medicare for COVID patients? Under legislative language proposed by ASA in the CCASPR act (Critical Care and Anesthesia Services Payment Reform), physician anesthesiologists would receive additional payments related to the complexity and difficulty with the care of COVID patients. We all realize how challenging the disease can be to manage, and physician anesthesiologists deserve to be paid more than we are for "routine" patients, just like hospitals.

Second, we communicated the critical role residents play on the front lines of the COVID battle and advocated for some debt relief, as well as relaxation of interest accrual on loans during training.

We discussed two other important federal topics with our lawmakers. First, we advocated for Safe VA Care and asked for assistance with reversing the VA's emergency action to suspend physician supervision for nurse anesthetists in the VA Health System. It is simply wrong that our veterans should be treated with a lower standard of care than the rest of us.

Second, although the issue was put on the backburner during the pandemic, we reemphasized the importance of solving the problem of balance billing for our patients. None of us want patients to be put in the

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Mark Your Calendars

ASA Annual Meeting
October 2-5, 2020
This year's meeting will be virtual, so you can attend from anywhere. Please see asahq.org, and sign up to be notified when registration opens.

VSA Fall Meeting
October 7, 2020
7:00 - 8:00 pm
Watch vsahq.org for more details.

AVAA/USSA Annual Meeting
October 2, 2020
8:00 am - 4:00 pm
Held virtually in conjunction with ANESTHESIOLOGY 2020. CME opportunities for all participants. Members of USSA and AVAA will be free. Non-members will be charged a nominal fee. Look for registration details on the ASA "VIRTUAL" Annual meeting registration website.

New VSA Regional Director

Congratulations and welcome to new VSA Tidewater Regional Director Dr. Katie Chan.

Balancing Competing Goals: Protests during a pandemic

By Brooke Trainer, MD, FASA
VSA UPDATE Editor


Dr. Brooke Albright-Trainer

It's hard to see the forest for the trees. These are uncertain times we are facing and many of us are inundated with worry. We worry over whether we will fall ill, when we will see our family and friends again, when we will recoup lost income, whether we will have enough PPE, whether racial disparities will improve, and whether this strife and unrest in society will resolve.

There is an eerie similarity between the situation we are living today and the pandemic of 1918, which coincided with the time America entered World War I (WWI). A century later, we again find ourselves in the midst of two competing problems: a pandemic, which keeps us socially distanced and isolated, and the fight against social injustice, which brings us together to protest for change.

People are choosing to come out of social isolation by the hundreds, gathering in large groups, and standing side by side to widely protest racial disparities and injustices. For weeks, we've heard the government mandates to keep your distance, stay six feet apart, wear a mask at all times, and stay home unless absolutely necessary.

Yet, despite knowing the inherent risks, people are lining up in the streets to protest. What will come of these protests? Will the wronged be righted? And what will come of this pandemic now that social distancing and public health measures have gone by the wayside.

Many physicians are watching the current protests and are deeply troubled by the recent events that have underscored social injustices endemic in our country.

We have seen the trends of this pandemic showing a disproportionate disease burden in minority communities. We want to stand up and advocate for what's right for our patients. But how do we balance advocating for human civil liberties during a time when bringing people together in close proximity could also threaten their lives?

At several hospitals around the state of Virginia, including UVA and Hunter Holmes McGuire VA, I was happy to see that physicians and residents wanting to stand for solidarity were able to organize and participate in peaceful and silent demonstrations. Everyone who participated wore a facemask and maintained social distancing, standing six feet apart from one another. No one screamed or yelled, pushed or corralled, and thank god, no one was pepper sprayed. Healthcare workers from every ethnicity, gender, and sexual orientation were represented. Though silent, the message was loud.

It is important that we, as frontline physicians in the battle against COVID-19, continue to advocate for maintaining public health standards during these equally important protests. As physicians, it is our duty to protect and keep our patients safe, in every way we know how.

George Santayana said it best, "Those who cannot remember the past, are condemned to repeat it". As I look to the future with this aphorism in mind, I worry we are going to see an increase in COVID-19 infections due to failure to comply with public health measures during the protests.

In 1918, when the influenza pandemic hit, the general public was largely unaware of the benefit of public health measures in preventing widespread infection. News outlets were censored by the government and forced to remain silent regarding influenza's contagious spread and lethality. Instead, the government encouraged Americans to participate in citywide street parades to raise money for the war.

Wanting to help out with the war efforts, and unaware of the public health consequences, Americans watched their own children, spouses, siblings, and friends enlist in the military and deploy to training sites where large numbers of soldiers from all parts of the country were brought together in close proximity. Sadly, it was after these military parades, and at many of these training sites, where America saw massive spread of the virus and the highest number of casualties.

Typically, young healthy patients are considered to be the most resilient and least likely to die from systemic infections.

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President's Message, *from page 3*

middle between physicians and insurance companies, but we must advocate for a fair payment system for our services. Through phone calls with legislators and their staff, we were able to communicate the importance of considering all of these issues.

Advocating for our practices and our specialty will always continue, whether there is a pandemic or other issues in the world. When we advocate for anesthesiologists, our patients benefit and for this purpose we are united.

If you are more interested in our advocacy efforts, visit the ASA Advocacy website at https://www.asahq.org/advocacy-and-asa-pac and make sure to sign up for the Grassroots Network. This is a great time to join us in spreading the word about how physician anesthesiologists make a difference.

As always, if you have ideas or feedback, please reach out to me at Jeffrey.green@vcuhealth.org. We are always looking for additional anesthesiologists to get involved and make important connections across the Commonwealth.

Editor's Message, *from page 4*

However, this was not the case in 1918. Sadly, young people ages 20-40 years old were among the largest population affected. At least 50 million, and likely closer to 100 million, deaths worldwide were attributed to the virus, most of them occurring in the 16-week period between September and December 1918, at the height of men and women coming together in close proximity due to WWI.[1]

Street protests are not the same as military training sites or parades, and the coronavirus is not influenza. But similarities remain: mass gatherings, even when held outdoors, with precautions, are potential catalyst events for infection spread—opportunities for a virus to explode through a population. Only time will tell whether these protests set us back on progress toward containing the coronavirus.

The word crisis in Japanese (危機=kiki) has the kanjis 危 symbol, which means "danger", and the 機 symbol which means "opportunity". These truly are dangerous times we are living in, but there is hope this pandemic can make us all stronger.

A decade of research at UCLA showed that people with a lot of lifetime trauma had the worst mental and physical health, but those with a history of some adverse life events were less distressed, had less disability, fewer post-traumatic stress symptoms, and higher life satisfaction over time than those with no negative life events.

In light of the current events, I think this is promising news for most of us.

References

1. George Santayana (1905) Reason in Common Sense, p. 284, volume 1 of *The Life of Reason*
2. Iribarren J, Prolo P, Neagos N, Chiappelli F. Post-traumatic stress disorder: evidence-based research for the third millennium. Evid Based Complement Alternat Med. 2005; 2(4):503-512. doi:10.1093/ecam/neh127

Members in the News

Dr. Huffmyer Receives FAER/ABA Research in Education Grant

Dr. Julie Huffmyer

Congratulations to Dr Julie Huffmyer, MD, from the University of Virginia, who was this year's recipient of the FAER/ABA Research in Education Grant ($100,00 over two years)!

Her study aims to explore the link between Continuing Medical Education for anesthesiologists in the form of quarterly Maintenance of Certification in Anesthesiology (MOCA) Minute® questions, and clinical performance through use of Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE) metrics.

Her research team's primary hypothesis is that ASPIRE metrics are associated with correct/incorrect performance on specific MOCA Minute® items. By identifying which MOCA Minute® items are most strongly associated with clinical performance ASPIRE metrics, she expects that it may be possible to provide targeted MOCA Minute® question administration to anesthesiologists in order to improve the clinical practice of ABA diplomates.

Visit the FAER website for further details about her research. Again, congratulations and best of luck to Dr Huffmyer in the start of her long and illustrious career in medical research!

Some Light in all the Darkness

- A Scuba tour company, Passions for Paradise, is planting coral on the Great Barrier Reef as tourists stay home during the coronavirus pandemic. The group's planting efforts have been focused on Hastings Reef, a popular diving spot within the larger Great Barrier Reef system
- In April 2020, the Himalayas were visible from northern India for the first time in 30 years.
- Ying Ying and Le Le, two giant pandas at the Ocean Park Zoo in Hong Kong, successfully mated for the first time in ten-years despite their previous failed attempts, showing all they needed was a little bit of privacy.
- A 99-year-old World War II veteran raised $35 million for Britain's National Health Service and has completed his quest to walk 100 laps of his garden in eastern England.

Resilience After a Knockout, *from page 1*

alarming are the reserves necessary to keep practices afloat. Most small private groups have no more than two to three months of reserves.

In the academic world, anesthesiologists felt safer and in a better position to weather the storm. That all quickly ended as reality set in. Large academic health systems started cutting physician salaries and benefits. The financial pains that private practice anesthesiologists felt across the country hit the academic anesthesiologists too. Major health systems reported massive losses and made cuts across the board to all physicians. Stanford, Johns Hopkins, and other major institutions reported hemorrhaging money with minimal reserves. These are the same institutions sitting on billion-dollar endowments.

Hospital administrators reported minimal profit margins for the health systems. While in the operating room, nonessential cases were postponed or canceled, academic anesthesiologists continued working in the operating rooms and ICUs across the country taking care of critically ill patients. Despite their valiant efforts, they saw 20% cuts in total compensation for an indefinite period.

Anesthesiologists across the country took similar or worse financial losses. Tony Mira recommended a few strategies for private anesthesia groups for weathering the recession and avoid layoffs. Options such as shifting staff from salaried to hourly, relocating staff to areas of higher clinical volumes, encouraging the utilization of accrued paid time off and utilizing extensive furloughs to help offset revenue losses. We should expect more waves of COVID-19 and should financially plan accordingly.

For the time being, the surgical pendulum has swung in the other direction. Elective caseloads have ramped up. Anesthesia services have now shifted back to the operating room. Despite increases in production of medical supplies, we still remain in a shortage. PPE supplies, anesthetic drugs and equipment are still on shortage. The spike in surgical volumes will continue to lead to shortages in medical supplies. Staff that were furloughed remain furloughed.

Our care teams have changed, and we are now left to be resourceful on how to provide safe care for surgical patients. When and how many anesthesia team members do we bring back? What are the plans if we see COVID-19 spikes that lead to another countrywide shut down? Too many questions and not enough answers.

> *The divide between healthcare systems and physicians has become a catastrophic fault. We have lost more trust in our healthcare system and, in essence, have been demoralized.*

In addition, the US Centers for Medicare and Medicaid Services (CMS) issued temporary suspension of physician supervision of CRNAs. Although this was a temporary measure to expand the healthcare workforce, this could have longer-term effects in our anesthesia team.

What about physician burnout? The COVID-19 virus has left healthcare workers physically, mentally, financially, and emotionally drained. The divide between healthcare systems and physicians has become a catastrophic fault. We have lost more trust in our healthcare system and, in essence, have been demoralized.

The long-term psychological impact of this pandemic is yet to be seen. Within a short window of this pandemic, two emergency medicine doctors committed suicide. People across the country were shocked, saddened, and left to wonder why a young successful physician would do that. They failed to see the burnout, and physical and mental stress we are under before COVID-19 became our reality. Now hospitals and health systems send out emails telling staff to take stress reduction class and meditate more. That is great but it does not address the true problem.

After the wave of COVID-19 cases engulfed China, studies looking at the emotional impact on healthcare workers began to be published. A recent cross-sectional study was published in *JAMA Network Open Journal* in March 2020. 1,257 healthcare workers in China, during the coronavirus pandemic, were involved in this study. The results were nothing but shocking. 50.4% had symptoms of depression, 34.0% had insomnia, 44.6% had symptoms of anxiety and 71.5% reported distress.

The study found that being a frontline healthcare worker was an independent risk factor for worse mental health outcomes. Previous SARS epidemic studies showed quarantine seriously impacted the mental wellbeing of healthcare workers.

Years after the SARS quarantine, post-traumatic stress symptoms were identified, and healthcare workers experienced more severe cases. Some healthcare workers never returned back to work. Time will tell how this pandemic will psychologically affect U.S. healthcare workers.

As a specialty, anesthesiology has always been essential and we have shown this now more than ever. We continue to grow and our reach and impact goes well beyond the operating room. Though the way we practice has been forever changed, anesthesiology is a versatile specialty that will continue to lead the charge. Anesthesiology has always been a desirable profession, and now more medical students are inquiring about it. Critical care fellowships are seeing more applicants than ever before. World leaders and organizations have recognized our contributions to healthcare and we should be very proud.

The COVID-19 pandemic has brought to the surface the strengths and weaknesses of our healthcare system. Physicians, nurses, and healthcare workers have been given an unprecedented challenge. In some areas, this pandemic has made the medical community stronger. In other areas, our weaknesses were revealed and left us wondering and planning how to be better prepared in the future.

The lessons learned are one of many that have shaped and will continue to shape our practice. Overall, the medical community has shown resilience beyond comparison and I look forward to seeing what our profession will do in the future. I am honored to say I am an anesthesiologist.

COVID-19: Anesthesiology Training During a Pandemic and the Path Forward

By Daniel H. Gouger, MD
Resident Editor, VSA Update
VCU Health Department of Anesthesiology

Dr. Daniel H. Gouger

For physician trainees in the wake of COVID-19, the academic year has been met with unthinkable, unparalleled, and seemingly unending challenges with little to no respite. We've navigated many previously uncharted institutional changes to our scheduling, workflow, training, and learning— and we've done so with arms linked by both camaraderie and leadership.

"I adjusted to the initial ramp-down by depending on our attendings and senior residents for guidance," said Dr. Nick Bastug, an anesthesia resident from VCU Health. "I needed them for reassurance… [I] felt like there were protocol changes daily and, although this was stressful, everyone was going through the same changes at the same time, and there was comfort in that."

When I asked him what advice and supporting insight he could offer to other residents, Dr. Bastug offered, "Although these changes can be frustrating, I just tried to remember that they are being made to keep us (residents) and the patients safe."

Nonetheless, trainees have understandable questions and concerns about the impact that COVID-19 has had and will continue to have, in particular, on education.

Dr. Alexander Skojec described that at the University of Virginia, subspecialty cases and emergencies were still occurring as elective volume was decreased, so junior and senior residents still had some learning opportunities.

"The volume of organ transplantations, especially livers, also provided both junior and senior call residents quality cases and procedures," he said, which was similarly echoed by Dr. Bastug at VCU Health. "Our outpatient and consult service experiences were impacted to a greater degree. UVA's Pain Management Center was unable to continue with clinic visits and elective procedures, leaving residents without traditional educational opportunities. [Although], great effort was made to preserve the rotation's integrity via research projects and website content creations."

Likewise, at both VCU Health and UVA, certain services like regional anesthesia and acute pain, or PACU, and consult services were all cross-covered by one or two senior residents. Residents at both institutions flexed into ICU coverage as well, employing the blended nature of anesthesiology and critical care training.

As with most institutions, lectures and academic time largely migrated to virtual platforms without much guidance. The administrative challenges chief residents across the state have faced this year in particular, are to be acknowledged. Balancing the stress of revising scheduling, coordinating academics, providing clinical care as senior residents, being intimately involved in developing safety protocols, and leading residents through adapting quickly to so many changes is commendable.

Still, the compounding stress of clinical adaptation, genuine concern for one's own health given high exposure risk, and compassion fatigue are all real circumstances that trainees across the state should speak about freely.

On airway bag call one weekend, I had to intubate a rather elderly woman who was COVID-19 positive with both altered mental status and underlying bacteremia seeding to her ICD leads. To consider intubation with probable precipitous decline and failure to extubate, or to pursue a palliative approach with de-escalation is an impossible choice for family members who were not even allowed into the hospital to see her. And that circumstance played out over and over again.

That I was likely the last voice heard or last face seen by that patient weighs heavily, even though I know that could be true of any anesthetic I provide. I remind myself that, just as with patients and families in these trying times, we must also be gentle and compassionate with ourselves.

So, as summer approaches, which is typically a moment for pause and celebration, COVID-19 has left many trainees feeling bittersweet and/or with a mixed bag of emotions. Graduations and match celebrations have been cancelled or moved virtually. This is true for graduating residents, as well as graduating medical students who will be entering interns amidst a pandemic. More junior trainees face a litany of concerns.

"Clinical electives are being administered online, USMLE exams have been cancelled repeatedly (and without notice), away rotations are up in the air, and the interview process is expected to proceed virtually," said Dr. Anja Miller, a recently graduated UVA medical student and incoming anesthesiology intern at VCU Health.

She expressed valid questions about the integrity and quality of future clinical education for medical students. "I hope to see our experiences with COVID-19 as an opportunity to reflect on the importance of USMLE examinations, [in particular] USMLE Step 2 Clinical Skills, which is on hold," she described of the commonly contentious exam.

USMLE Step 2 CS, as well as the osteopathic counterpart COMLEX Level 2, are both pass/fail and have many criticisms regarding benefit and utility given the substantial financial burden, required absence from rotations, and inability for examinees to receive summative feedback on performance and scoring.

She likewise pointed out that with reduced clinical exposure, especially for specialties like anesthesiology that is already typically limited for medical students, COVID-19 aftermath may result in inadequate reflective experiences to inform well-reasoned specialty and career choices.

Dr. Miller noted, "Initially it [the COVID-19 experience as a whole] was challenging for students as we were receiving different information from various corners of the university system and often we had periods of silence. Through this experience I have learned that communication and transparency, especially in times of uncertainty, is crucial."

Resident Editorial, *from page 7*

Looking forward into long-term adjustment and life with COVID-19, our reflective experiences as trainees should generate sincere, high-level discussions between trainees, departmental, and program leadership. Resident turnover is much faster than faculty at only three to four years. Once we as a larger anesthesia community have moved on from the days of quarantine, we should be intentional about steps to take now to instill institutional memory of COVID-19 responses for future residents who haven't experienced this:

- It bears out that online/video based learning, flipped classroom models, and simulation based education should continue and likely have stronger presence in program curricula.
- Likewise, residency programs, as well as the Board of anesthesiology as a whole, might consider that more public health, pandemic, and scalable disaster response training should be incorporated as formalized standard components to Anesthesiologists' training and education.
- Many programs have bolstered group wellness, exercise, and therapy activities, too, which likely have long-lasting benefit regardless of external circumstance.

> *Once we as a larger anesthesia community have moved on from the days of quarantine, we should be intentional about steps to take now to instill institutional memory of COVID-19 responses for future residents who haven't experienced this*

What I can say as a simple, distilled reflection on training amidst COVID-19 is this: Medical school and residency training is singularly arduous enough; compounded with so many other variables, it is a marvel how we've endured. We persevere, and continue to do so with strength, grace, and profound resilience.

The whole experience is a magnifying glass on strengths and weaknesses in health systems, marked health disparities, and medical education structures that need thoughtful retooling to move forward. But it also magnifies the vitality and flexibility of anesthesiologists, and our commitment to each other, our healthcare systems, and communities.

So, in an ongoing exercise of decompression, positive affirmation, and self-rallying during COVID-19 life, I keep saying softly of us all, "For the love of Virginia, we breathe for you."

A Poem

My friend, a good nurse

"I'm a bad nurse," she voices.
She makes patients feel cared for,
Normally.
She makes them feel loved.

"I'm a bad nurse," she repeats.
Her goal is to minimize their
interactions.
And go as fast as she can.

She takes care of COVID patients.

She hangs the fluids,
Gives their meds,
And gets out.

Her patient berates her.
Not feeling her care,
the warmth of her touch,
Nor the joy of her spirit.

He tells her that she's "a bad nurse".

We call her 'Hero'

But we step away
When she steps a foot too close.

She understands.
But it still hurts.

By Anna 'Anja' Julia Miller, MD
PGY-1 Resident of Anesthesiology
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The Role of the Anesthesiologist in the Time of COVID-19

By Megan Rashid, MD
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Dr. Megan Rashid

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Introduction

With the COVID-19 global pandemic came unprecedented changes to the landscape of healthcare. As hospitals paused elective surgeries, the role of the anesthesiologist would be redefined in the wake of this novel disease. Adaptability to unexpected changes is one of the primary attributes of a Diplomate of the American Board of Anesthesiology. It is this adaptability that is so inherent to the specialty of anesthesiology that has allowed for anesthesiologists to not only survive, but thrive during this time of crisis.

With expertise in ventilator management, physiology, pharmacology, and resuscitation, the anesthesiologist carries an armamentarium of clinical knowledge that can be applied outside of the traditional arena of the operating room (OR). This clinical knowledge combined with procedural expertise in techniques such as endotracheal intubation, allows for anesthesiologists to be uniquely suited to care for the most critically ill patients during a time of pandemic.

Anesthesiologists in the Intensive Care Unit

Although less than 5% of anesthesiologists pursue fellowship training in critical care medicine, this subspecialty serves as a cornerstone of residency training. While there may be an absence of chronicity, the management of a patient in the OR and the post-anesthesia care unit (PACU) draws many parallels to the management of a patient in an intensive care unit (ICU). Whether at a tertiary care medical center or a community-based practice, pathologies such as acute hypoxemic respiratory failure, septic shock, and acute renal failure are encountered regularly in the OR. By translating their OR-based knowledge to the ICU, traditional anesthesiologists can play an invaluable role in managing the critically ill.

> *COVID-19 is characterized by the development of severe acute respiratory illness. Because of their ability to deliver life-saving intervention in the form of endotracheal intubation, anesthesiologists have served a vital role since the onset of COVID-19 crisis.*

Training the non-ICU anesthesiologist to perform critical care duties must take into account both didactic education and practical considerations. Multiple online resources were developed by professional societies to aid in this transition, including COVID-Activated Emergency Scaling of Anesthesiology Responsibilities (CAESAR ICU) (1) from the American Society of Anesthesiologists, Critical Care for the Non-ICU Clinician (2) from the Society of Critical Care Medicine (SCCM), and UpToDate (3), which has offered its services for free during this time of emergency.

To bridge the gap between management in the OR and management in the ICU, the anesthesiologist should spend time shadowing an intensivist in a critical care unit. This allows them to learn the more practical aspects of running an ICU, including workflow, chronicity of care, increased mortality, and expectations for staff interaction. This time can also be used to review unit- or hospital-specific protocols and equipment relevant to the ICU that may not necessarily be common in the perioperative environment.

When enlisting anesthesiologists for the ICU, a task-oriented approach to patient care may also be considered. Limited by time and urgency during a pandemic, the ad hoc training of anesthesiologists in critical care medicine may be cursory. A task-oriented approach to patient care could allow for the anesthesiologist to develop expertise in a specific component of ICU patient care (e.g. sedation titration, or vasopressor management), and focus on skills that may already be within their scope of practice. As hospitals reach crisis capacity, a task-oriented approach may improve the efficient delivery of patient care.

Anesthesiologists as Proceduralists

COVID-19 is characterized by the development of severe acute respiratory illness. Because of their ability to deliver life-saving intervention in the form of endotracheal intubation, anesthesiologists have served a vital role since the onset of COVID-19 crisis. Given the marked hypoxemia that characterizes the most critically ill patients, and the speed which they decompensate, it is imperative that airway management be delivered by the most experienced personnel. In most healthcare organizations, this is the anesthesiologist. Unsuccessful intubation attempts risk significant morbidity and mortality for the patient, and furthermore, allows for undue exposure of viral particles to the proceduralist and other healthcare workers in the surround.

A team designed specifically for the airway management of COVID-19 positive, or suspected patients, allows for safe and efficient delivery of this potentially life-saving intervention. With expertise in endotracheal intubation, anesthesiologists are essential to this team.

In addition, given the increased burden of appropriately donning and doffing personal protective equipment (PPE), this designated team develops proficiency in these maneuvers, thus decreasing risk of exposure for everyone involved.

The anesthesiologist in many places has also been relied upon in this crisis for their mastery of other procedures beyond endotracheal intubation, including placement of central lines, arterial lines, and knowledge

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The "New Normal"

By Jessica L Feinleib MD, PhD, CHSE
VACTHS: Medical Director of Simulation, Anesthesiology Field Advisory Committee Member,
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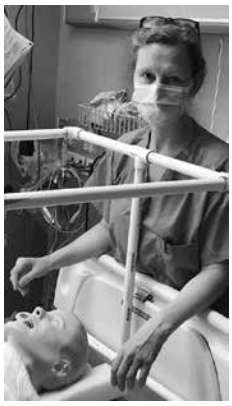

Dr. Jessica L Feinleib

I keep circling back to my frustration that this COVID-19 crisis did not need to be this way. The lack of understanding of the science and flagrant disregard for the history of medicine has placed us in this confounding spot.

We could have faced this pandemic far more effectively. We would not need to beg for PPE, build intubation boxes, frantically compile educational materials and lose sleep worrying about how we are going to approach patient care with safety for healthcare providers while maintaining the highest standards of care.

We spend our time in the MICU with teams of nurses and respiratory therapists on airway standby during the proning of our patients. Then we worry that we should not waste PPE as we need to save every scrap for "real cases". We joke grimly that all we have is public health and supportive measures and are saddened by the thin soup of any new medical therapies. We shock our residents when we make sarcastic remarks that we "feel good about hydroxychloroquine" because that is now how we determine new therapeutic regimens these days, with our feelings. The sarcasm in an effort to dispel the painful frustration that plagues us every day battling this unmitigated terror of a virus.

Meanwhile, all of our regular medical care is on hold. This is a tragedy for our patients waiting for procedures or risk being exposed to SARS-CoV-2 while being treated for their illness. We are in a quandary as to how to manage their airways. The testing is so far from trustworthy that we gown up in full PPE for every surgical case even if the patient is "negative". It is a constant high stakes game of twister caring for the simplest of surgical cases. The backlog of patient care on hold is staggering.

I think back to classes on public health and our prior failures to remember history. The real truth is that "saving money" on public health expenses is a false economy of the grandest scale in terms of human and financial capital. It is no coincidence that, after the Reagan years of defunding the federal and state public health services, we got multi drug resistant TB and a full-blown AIDS epidemic as our prize.

Now we see again that if you defund, disassemble, and denigrate the international, federal and state offices that are responsible for public health you get a rampaging virus that could have been contained! An ounce of prevention is not worth a pound of cure, it is worth a ton of cure.

Will we learn going forward? Or will we be ignorant and mentally lazy and go back to normal? A new normal will take effort and a vision for the future. Is America up for that kind of work? Are we too lazy and concerned about "getting our hair done"?

We can gain dividends if we re-build and re-invest in infrastructure with a careful eye to increased telework and green energy. While spending on prevention we should look to restructuring our healthcare system to support optimum health and not be a system of "sickness" care.

We must insist that we gain something from this shocking loss of human and financial treasure.

Role of the Anesthesiologist, *from page 9*

of how to safely prone a sedated patient. In many institutions, the airway team has expanded its role into procedure teams and proning teams, to minimize the number of people exposed to each COVID-19 positive or suspected patient.

Anesthesiologists as Innovators

The COVID-19 global pandemic has inspired many anesthesiologists to develop methods of remedying the unforeseen problems encountered in this crisis, including shortages in PPE and ventilators. As a group, anesthesiologists have led the charge for the conservation and recycling of PPE (including mask sterilization), and created multiple solutions to full-cover PPE in the operating room (including airway management scaffolding made of PVC pipe).

As hospitals have reached crisis capacity, at many organizations anesthesiologists have pioneered the conversion of procedural areas, post anesthesia care units, and operating rooms into novel ICUs. With unparalleled knowledge of the perioperative environment, anesthesiologists have been able to develop fully functional ICUs out of the resources already present in the OR. Furthermore, in response to shortages in ICU ventilators, anesthesiologists have adapted the anesthesia machines to meet this demand. This adaptability and innovation is a cornerstone of being an anesthesiologist, and the specialty has flourished under pressure.

Conclusion

The COVID-19 global pandemic has allowed for anesthesiologists to venture outside of the operating room and apply their clinical knowledge base and procedural skillsets to a previously uncharted arena. Trained to adapt to the unexpected, anesthesiologists have responded to this crisis with resolve and innovation. With a scope of practice that extends well beyond management of sedation, anesthesiologists have demonstrated the essential role that they play within a healthcare organization. The next steps should be dedicated towards applying the lessons learned from the pandemic to advance the specialty of anesthesiology as a whole.

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Adapting to New Information

By Justin Bremer, DO
Staff Anesthesiologist
Hunter Holmes McGuire VAMC

Bertrand Russell said, "The whole problem with the world is that fools and fanatics are so certain of themselves and wiser people so full of doubts."

There is no such thing as complete data in the real world. Every publication must include a caveat at the end that the topic merits further study, right? Fortunately, we have mechanisms to act on incomplete data, which have been well described by the work of Daniel Kahneman. Either we can extrapolate from prior experience or we can act on the data we have as if it was complete and accurate.

Type 1 thinking is fast, emotional, and prone to errors if a situation is not actually like a prior experience. Type 2 thinking is slow, rigorous, and prone to errors if mis-prioritized in a complex situation. In medicine, we are moving toward administrative controls to protect patients from our type 1 thinking. Checklists, simulation, EMR alerts, standardized protocols - all are intended to use prior type 2 thinking during a complex situation.

Largely, these have been effective and led to improved outcomes in medicine, but it does not translate well in a novel situation. As such, we started our response with Type 1 thinking and its' inherent errors. This thinking was largely based on two memorable data points - SARS and the Spanish Flu. Negative experiences make the strongest memories, and the now-recitable "flatten the curve" probably wouldn't exist without an event that happened over a century ago - a cultural memory.

SARS is a much stronger memory in Asia, where it literally caused a redesign of ICUs, but largely spared most of the US. I probably couldn't remember what year it occurred six months ago. Still this response, while crude, is protective if not rational.

With the advent of some data, we tried to move to Type 2 thinking. Reports from China were published in top-level journals at an extraordinary speed. Preprint servers became more popular than Tinder. But Type 1 decisions and positions became hardened by the ability to pick from conflicting data sources. This can be forgiven when people are working 18-hour days and staff are out sick in droves, but that isn't the reality at this point.

It is time for a humble assessment of data quality, and an honest assessment of how our thinking can be improved.

> *Personally, I have been as guilty as anyone. I moved to the basement in March and updated my will. I pulled the kids out of school a week before the order and didn't buy anything but gas to get to work, and as many respirators as I could find. It was a bit like a trauma call.*

As anesthesiologists, we are in a unique position of having to synthesize data from several specialties and make a coherent mitigation strategy every day. Each specialty prioritizes their own data, and we have to sort through the thyroid panel and the FEV1 to find the difficult airway on the shoulder arthroscopy two years ago. We have to make a determination about threat to life, often from too much data, much of it irrelevant. Patients rely on us for this skill.

Personally, I have been as guilty as anyone. I moved to the basement in March and updated my will. I pulled the kids out of school a week before the order and didn't buy anything but gas to get to work, and as many respirators as I could find. It was a bit like a trauma call.

After a month, there was a slightly better picture. PCR tests were finally being accomplished at a rate that might give an approximation of the disease burden. People who had never used the term "naught" previously, now were experts. Only a few knowledgeable voices were saying the data was woefully incomplete, notably John Loaniddis. I found it easy to shrug them off as my own mother was sickened.

Finally, I was on call and read the now famous (infamous?) Santa Clara preprint. I remember thinking how astonishing it was that in mid-April we had literally no idea if our prevalence data was accurate within an order of magnitude or more. At the same time, the paper had clear flaws and got pilloried. But the fact that no one could reasonably say it was wrong (and not just bad science) because of actual data concerned me. The follow-on studies had similar findings (and flaws) but the question remained - what is the actual denominator? Would a study as proposed by the detractors provide the data?

Maybe antibodies are not a good proxy for immunity or exposure. In the last month there have been at least three papers or preprints regarding t-cell immunity that appears to stem from seasonal coronavirus exposure[2-4]. The percentage ranges from 34-60% depending on the study and target protein. Is it protective? Does it trigger a hyperactive response?

In all of this, we may be able to bridge the gap, with humility, between those who have dug in on one side or the other. We learn to work with the same surgeons and the same OR staff even if we have different priorities and different experiences. We learn to compromise on some things so we can hold firm when we feel it is imperative. We should be up front with our patients with our own limitations of knowledge. Sometimes we even have to act on very incomplete data.

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Meet Your Legislator: Siobhan Dunnavant, MD

By Senator Siobhan Dunnavant

Senator Siobhan Dunnavant

I'm often asked why I ran for Senate, and I don't have a simple answer. I know one part of it was a belief that I could solve problems in a bigger and more effective way. I really like figuring things out. I think it's what drew me to medicine, where I have developed a set of problem- solving skills that I use for everything I do, including the Senate. Let me tell you how being a state Senator is a lot like being a physician.

Legislating is an art I practice. I never know it all, so I am always researching, testing and learning from others' successes and failures. Doctors look at complaints or issues with the belief that they can find a solution, and that's exactly how I legislate.

We have to ask all the right questions to figure out the problem and the hidden issues that might make it harder to fix. Eighty percent of a diagnosis comes from asking the right questions. Always question the presumed diagnosis or conclusion. How is this problem as it currently exists related to other relevant systems? Break it down even to the biochemistry of the problem. Always recognize that there's a differential diagnosis and a list of possible solutions.

Evidence-based plans and measured outcomes help determine if the solution you created worked. You always need to be open to the idea that you're wrong or need a different solution, and ready with a plan to find that solution. Unexpected twists and turns may influence the success of your plan, so have lots of options and be ready to adapt. Look for hidden biases or agendas that might undermine or sabotage a solution. Respect and incorporate cultural issues and differences.

When legislating, cultures can be anything; a demographic, an agency, "the way we have always done it", economics, literally anything. The best solution is not always the solution that most directly solves the problem, but the one that incorporates all of the biases, cultural issues, and confounding variables.

When recognizing you could be wrong, always be willing to ask for help or someone else's insight. Call in a specialist where needed. Pride equals mis-judgement, so build consensus, get buy in, breakthrough barriers to make sure your patient (colleagues) and the team are on board with your plan. It is ok for someone else to believe a solution or policy is their idea and take ownership.

Effective bedside manner for senators requires respect, kindness, patience, and good eye contact. Always tell the truth in the most tactful way possible, even when it is bad news. Be ready and able to translate complex details into conversational language and deconstruct an idea. Above all, do the job for the right reasons; it's not about you.

The COVID-19 pandemic has been an incredibly unique intersection between being a physician and being a legislator. As the only physician in the legislature, I thought it was important to apply our skill set to conversations with my constituents.

It was such an unusual time when the Governor issued his Stay at Home order. We had so little information about COVID-19. The specific precautions we took were broad action items to ensure we protected people who might be critically ill and ensured we had capacity to care for them.

Scenes from New York City and the thought of people lining the halls of our hospital, unable to be cared for, were paralyzing. Thank God it didn't happen.

I scrambled to adapt in my practice by doing things like initiating telemedicine to care for patients. Between patient care, I was on conference calls with the federal government, the state government and my hospital, making sure I was educated and ready for what might come.

About three weeks into the Stay at Home Order, towards the end of March, I became unnerved by how little information was available to help us make decisions. Everyone kept talking about "the curve." I reached out and started asking ER docs on the front lines, hospital administrators, and eventually the epidemiologist at the state the questions that my constituents needed to know.

Where is Virginia's curve? Where are we on the curve? What data are you using to reach your conclusion? I was shocked to learn nobody really had a curve. Washington State University published early predictive curve data that was state specific. I knew I had an outlet to share this with my constituents, so I began my Facebook Live broadcasts.

By using Facebook Live, I was able to review available data and interpret it to followers. It was a way I could reassure them with facts rather than anxiety-ridden reports littering the internet.

At that time, so much of the data needed to be vetted. I found that just like patients, followers of these videos often clung to

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Legislative Update: Summer Edition

By James Pickrell and Lauren Schmitt
Commonwealth Strategy Group

General Assembly Update

Virginia's General Assembly met on April 22, 2020 for "Reconvened Session" to vote on the Governor's actions on bills, including the state budget. The regular session had adjourned on March 12 after a historic election and heavy legislative workload with Democrats in control of Virginia's government for the first time in almost 25 years.

This year's Reconvened Session was unprecedented in its own way, as the General Assembly met amid the COVID-19 pandemic to deal with the tough policy and budgetary decisions that the crisis has made necessary. The Governor proposed a package of legislative amendments to address public health, freeze new state spending, push back May local elections, delay the implementation of certain labor reforms, and grant the Governor more authority over certain spending while the economic impact of, and recovery from, COVID-19 plays out.

To ensure the safety of its members, the General Assembly abandoned the interior of the state capitol building to meet in alternative locations. The House of Delegates erected a large outdoor tent on capitol grounds, while the Senate met in an indoor event space at the Science Museum of Virginia a few miles away. Legislators sat at least 6 feet apart and often wore masks and gloves. While some glitches and snafus delayed the work of the House of Delegates, both chambers were able to conclude their business by day's end.

Budget

As we all know, everything has changed drastically since the legislature adjourned

in March and passed a budget that included an increase in Medicaid reimbursements for anesthesia that brought us to 70% of Medicare. We are now in the midst of the COVID-19 pandemic that has resulted in both a healthcare and economic crisis. As such, the legislative voted at the Reconvened Session in April to temporarily freeze all new spending in the budget. The language state that these "amounts shall remain unallotted until re-enacted by the General Assembly after acceptance of a revenue forecast that confirms the revenues estimated within this Act." Unfortunately, but not surprisingly, our Medicaid increase was part of the "unallotted" expenditures.

The legislature will address all of this "unallotted" spending when they convene for a special session this summer.

Special Summer Session

The Governor has announced he will call the General Assembly back into a special session in late July or August to further address the budget after new revenue forecasts are available that accurately reflect the economic and fiscal impacts of the pandemic.

It is likely the legislature will also consider comprehensive criminal justice reform during this special session. In the wake of recent news events, there have been calls from both sides of the aisle on the need for criminal justice reform.

Next Steps on Surprise Billing

As a result of the surprise billing legislation we passed this session, the Virginia Health Initiative has created a workgroup to develop commercially reasonable payments data sets for the arbitration process. VSA has two representatives on this workgroup and are working to ensure the rates for anesthesia are developed accurately.

MSV Update

As a result of the COVID-19 pandemic, MSV postponed its annual advocacy summit and has rescheduled it in a "virtual format" for Friday, July 17th. They have requested that all advocacy proposals have a connection to public health and COVID-19. All proposals will be presented and reviewed on the 17th. After that, the Specialty Advisory Council will meet on July 30th to make recommendations on the proposals.

VaSAPAC

Our PAC is a critical tool in our advocacy program. It allows us to support legislators who are friendly to our profession and issues in the General Assembly. As you know, every year the legislature considers bills that could potentially impact our profession and patients. A strong PAC provides us the opportunity for our voice to be heard by elected officials in the legislature and executive branch. Our PAC enables us to support legislators who support our profession. Please support the VaSAPAC and make your contribution today! https://www2.vsahq.org/forms/VaSAPAC.iphtml

Siobhan Dunnavant, *from page 12*

studies that were not relevant but maybe supported their opinion. Lots of questions and conversations ensued, making sure people understood things like droplet transmission versus airborne, the theoretical value of masks, and everyday prevention measures.

I would have liked to see more patient-focused habits reflected in decisions made by the state. More education, more communication and engagement of Virginians, just like how we engage patients. I believe it would have resulted in less anxiety and conflict.

This experience has affirmed how valuable my skills developed in medicine are to all facets of my life, including legislating and being a community servant. Next time, I'll explain how being a state Senator is a lot like being a mom to teenagers.

Observations of a Pandemic

By Tamara D. Lawson, MD, MPH
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COVID-19, the novel coronavirus that is believed to have originated in the Wuhan province in China, has seized worldwide attention in an unprecedented fashion[1].

The pandemic has had a dramatic impact on global health indices, economic stability, and geopolitical systems. The medical community has been central in the response to the virus. Frontline healthcare providers, public health officials and researchers, all have focused their efforts on mitigating the effects of this virulent pathogen.

Similarly, anesthesiologists have played an integral role in clinical settings locally and throughout the world. As perioperative and acute care medicine specialists with expertise in airway management, anesthesiologists have answered the call in numerous ways throughout the pandemic response. From providing airway intubations for critically ill patients, delivering perioperative medical management, and contributing to crisis response planning, anesthesiologists have been a constant in the effort to combat COVID-19.

Although there were warning signs of impending problems in late 2019, this virus caught many by surprise. Here in the U.S., it presented as an unwelcome crisis to open the New Year. The first recorded COVID-19 positive patient was reported in the U.S. in January 2020[2]. Now, six months later, the virus has been detected in every state in the nation, with nearly two million people affected[3].

Through this brief, yet challenging period, there have been a number of valuable lessons learned that will aid in the ongoing pandemic response. Key principles that have emerged as integral to a thorough, cohesive response include comprehensive preparation, adaptability, and effective communication.

Goal directed and organized teamwork is imperative. This requires leadership to reconcile the evolving needs with available resources to develop a sustainable response strategy.

For years, the concept of a worldwide pandemic has been the topic of Hollywood movies and popular fiction novels. It was not until the advent of COVID-19 that the full gravity of the scenario was realized. While state, regional and federal agencies have long prepared for mass casualty events and large scale infectious outbreaks, COVID-19 has put all of these efforts to the test, and in many areas, revealed opportunities for improvement.

The threat of simultaneous, large-scale increased demand for hospital beds, personal protective equipment and critical care level attention, presented real concern that the needs would exceed many institutions' baseline capacities. This situation, coupled with a widespread lack of testing capacity, left most with more questions and anxiety than answers. The surreal nature of recent events has become a common theme of conversation, twitter feeds, and online posts. From driving through deserted shopping areas normally bustling with activity, to walking through nearly empty operating suites, the impact of the virus has been ubiquitous.

Anesthesiologists in general do not comfortably sit back idle in a crisis. By training and experience (and some would argue by nature), anesthesiologists are accustomed to being agents of change. They are often the provider in the room with answers and solutions, capable of fixing a problem as it arises.

Not surprisingly, at every stage of this pandemic response anesthesiologists have been at the forefront, caring for patients, consulting, and innovating. Industrious anesthesiologists around the globe have created numerous prototypes designed to mitigate provider exposure to patients during aerosol generating procedures.

A central source of accurate, succinct information is imperative to keep pace with the large volume of input during a dynamic pandemic response. Developing a communication strategy within a health organization that facilitates the dissemination of reliable, high yield information in a timely fashion is important. Too little information regarding the situation, plans, and contingencies, risks fueling fear-led anxiety, and distrust. Too many communications may cause some individuals to disengage, thus potentially missing important information when presented.

The right balance would be based on the circumstances - more frequent updates during times of increased activity and a stepwise reduction as the situation resolves. The format of the communication needs to be carefully considered as well. Obviously, traditional in-person meetings have been limited due to health concerns, thus other methods of large scale messaging have been used with increased frequency.

Virtual meetings, email, physically posted announcements and password protected apps are all viable options to ensure important information is conveyed. A multimodal approach to communication that permits individuals a myriad of ways to connect is ideal. The redundancy of options helps to mitigate potential disruptions in normal practices during the crisis response.

Regardless of the healthcare setting, the pandemic has demanded a coordinated effort to optimize patient care, manage scarce resources, and to minimize exposure risks. Inpatient hospitals, long term care, and urgent care facilities, have all prioritized disease prevention and containment while caring for patients. These themes will continue to take precedence as state mandated activity restrictions are loosened.

Based on the impact of reopening in other places in the U.S. and throughout the world, Virginia will likely experience a spike in new cases. Sustained high quality surveillance,

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Anesthesia Private Practice in a Viral Pandemic

By Casey Dowling, DO, FASA
Winchester Anesthesiologists, Inc.


Dr. Casey Dowling

When the national emergency for COVID-19 was declared, the crisis left my anesthesia private practice group feeling overwhelmed and uncertain for what the future would bring.

Initially, we worried about whether the disease would strike our region and we would fall ill. Then we worried about the accuracy of the prediction models and whether this was being overblown – some of the numbers they predicted were staggering!

If these were accurate predictions, were we going to have enough PPE? All of us were nervous about caring for these highly tenuous and sick patients, as well as protecting ourselves from possible infection.

We watched New York and Philadelphia get their first cases, and then swoop up the exponential curve. They needed more ICU space. They needed more critical care physicians. They needed more ventilators. And they needed much, much, more PPE.

So, while we waited for our own surge, we studied, and we prepared.

We learned that our anesthesia circuits were in fact N99. We learned that our anesthesia machines could be made into ventilators. We learned which rooms in the OR, in the ICU, in the PACU, and in labor & delivery, were negative pressure. We learned how to make our own PPE with everything from parts of the circuit, to a scuba mask with PVC! Oh, and of course, we learned how to Zoom.

We learned that all this knowledge, which was literally being updated by the minute, had to be transferred to the whole department. With operating room cases down 70%, only a few of us were on site at a time. Thus, clinical emails went out daily. And we had organized meetings every week with both virtual, and socially distanced attendance.

I am extremely excited to say, we learned our hospital system recognized that the physician anesthesiologist is a vital resource in the care of critically ill patients. Only one of my 30 partners is Critical Care Boarded and works in the ICU. But because of his shining example, we were approached to assist the intensivists, if the COVID surge were to stretch their capabilities.

I am proud to say that my department stepped up to the challenge. On our own time, we rotated through the ICU. We had to learn the EMR, as well as the routines of sign out and rounding. It was an amazing and educational experience for all of us. There were some downsides - when writing my first ICU progress note, I felt somewhat like an intern all over again!

With the knowledge gained, we drafted our facility specific protocol detailing how we would handle a COVID-positive patient for a surgical procedure. First and foremost, our practice decided that COVID positive patients be managed by a physician only. This plan not only limited the number of staff exposed, but more importantly, it allowed the patient to be managed by the most senior trained and educated provider, with the most experienced airway skills, and the ability to make critical decisions regarding their clinical care in real-time, when seconds count.

In times of crisis, we must all seek the silver lining. In this case, the world has now been exposed to our amazing profession of anesthesiology. I have never been more proud to be a physician anesthesiologist.

Observations, *from page 14*

contact tracing and social distancing will remain important for disease mitigation.

The pandemic has also highlighted the value of highly adaptive systems and individuals to an organization during times of stress. Flexibility is not a concept solely suited to our physical bodies, but is applicable to our attitudes and workplace as well. Adaptable individuals tend to be resourceful, creative, and forward thinking. This versatility is a favorable characteristic when responding to unprecedented challenges.

Anesthesiologists and physicians in other specialties have used their valuable skill sets in innumerable ways during the regions' COVID operations. Likewise, health system adaptability allows the organization to continue to provide services during critical events. Organizations need crisis care plans that are modifiable in scope and scale.

The pandemic has also necessitated an adjustment in how we approach most aspects of our professional and personal lives. There are changes that are likely to remain long into the future. These include uniform use of face masks during routine patient encounters, infectious disease screening, as well as an increased focus on surface cleaning.

COVID-19 has left an indelible mark on every aspect of our daily lives. With the number of positive cases rising daily, it is a mystery as to how the next twelve months will evolve, for the state of Virginia, the nation and countries around the world. What is certain is that the resilience and strength already demonstrated will serve as a foundation for the events to come.

As professionals, colleagues, and community members, anesthesiologists will remain an indispensable part of the COVID pandemic response. The historical review of this pandemic may show that it was the adaptability of the people impacted and the sustained teamwork of those charged with responding that ultimately led to a positive outcome.

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The Blue Ridge Pain Management Associates (BRPMA) in Salem, Virginia

Dr. Monty Baylor

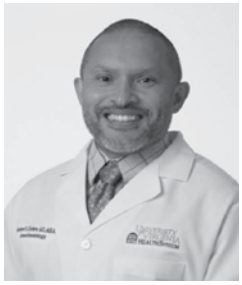
Dr. Marc Swanson

BRPMA started with a simple philosophy: treat our patients, staff, and ourselves fairly, expertly, and compassionately.

Since our founding in 2009, we have grown from two physicians and one PA with a handful of employees, to four physicians, four PA's and 24 employees! Founding partners, Drs. Monty Baylor and Marc Swanson, look in amazement at the transformation of medicine in general, and our practice over the last few years.

Instrumental in our growth and ongoing success has been our outstanding administrative staff, lead by Colleen McLean. We are blessed by talented, professional, and hard-working physician assistants, who play an integral role in managing our practices patients. Thank you, Laura Davis, Dana Adams, Katie Daniels, and Jordan Young.

Dr. Anthony Dragovich



Dr. Andrew Crichlow

In 2013, through contacts developed during Dr. Baylor's 23-year military career, we recruited and hired Anthony Dragovich, MD whose fresh outlook, clinical expertise, and ambition, has pushed our practice to new heights.

We are founding members of the Virginia Pain Society, with Dr. Dragovich serving as President and Dr. Baylor as a board member. We also serve as clinical faculty at VT-Carilion School of Medicine, Edward Via College of Osteopathic Medicine, and Liberty University College of Osteopathic Medicine. Three of our former employees are currently in medical school!

Additionally, over the past five years, we have opened a second location in the Roanoke Valley in downtown Roanoke and a satellite office in Christiansburg, VA. We currently receive referrals from a 200-mile radius, with a catchment area of 1,000,000 people! Two years ago, Andrew Crichlow, MD joined us after completing a fellowship at UVA and is developing a thriving practice.

In July 2019, we opened an 11,000 square foot facility that serves as our practice's main clinic space and administrative headquarters. We treat a gamut of acute and chronic painful conditions, and we employ a comprehensive approach.

All our offices include onsite fluoroscopy and ultrasound capability to perform a wide variety of interventional pain procedures. We are a regional center of expertise in advanced neuromodulation therapies and have an active surgical implant service with over 200 surgical cases annually. We also provide our patients with cutting edge pain management therapies to include minimally invasive lumbar decompression, SI fusion with Corner-Loc and balloon Kyphoplasty.

Over the past two years, we have expanded our in-house diagnostic capability to include onsite liquid chromatography for urine toxicology, genetic testing, and remote activity monitoring. We also have an in-house dispensary for workers compensation patients, in addition to select pharmaceutical agents such as CBD for all patients.

As the field of pain management evolves, Blue Ridge Pain Management Associates has progressed accordingly and will continue to treat our patients and community fairly, expertly, and compassionately.

Encourage Your Practice Administrators to Join VSA

The VSA encourages your practice administrators to join! We have two options:

1 If 90% or more of a group's physician anesthesiologists are VSA Active members in good standing and all members will be on a single group bill, the annual dues are FREE.

2 If less than 90% of a group's physician anesthesiologists are ASA Active members in good standing, or the group does not participate in group dues billing, the annual dues are $75.00

To have your practice administrator join, go to: https://www.asahq.org/member-center/join-asa/educational

- On this page, click on the category you're interested in – in this case, its: Anesthesia Practice Administrators and Executives – Educational Member
- Click on the + sign next to the title
- The box that opens, will contain full details and the membership rate(s)

PRACTICE MANAGEMENT 2020: Pushing the Boundaries

A Review of the American Society of Anesthesiologists' (ASA) Practice Management Meeting

Originally published in the *ASA Monitor*. Reprinted with permission

By Emil Engels, MD, MBA, FASA

Dr. Emil D. Engels

Paris Hotel, Las Vegas, Nevada - The two opponents faced off with millions of dollars at stake. This match was months in the making. The period leading up to it had included hours of preparation, and was marked by posturing, threats, and hyperbole.

Does this sound like your recent managed care or hospital negotiation? It is actually a description of the Connor McGregor and Donald "Cowboy" Cerrone Welterweight UFC bout that took place minutes from the ASA's Practice Management Meeting.

Many anesthesiologists and practice managers feel like they're in a heavyweight fight. The blows keep coming, whether from hospital administrators, managed care companies, or related to recruiting difficulties. Practice Management 2020 helped prepare attendees to not only survive, but thrive, in this difficult environment.

This year marked the 25th anniversary of the meeting, and attendance numbered 1,019. Topics ranged from consumerism to the aging physician. Dr. Alex Choi, Chairman of the Committee on Practice Management, commented: "Practice Management 2020 continues to be the premiere conference to provide education to improve the business of anesthesia.

With non-traditional topics such as healthcare consumerism, gender equity, supply chain management and artificial intelligence, and how knowledge of each can move a practice forward, the year's conference pushed the boundaries of practice management topics."

Challenging the audience, Ryan Donahue gave a provocative keynote lecture entitled: "Healthcare Versus the World." Mr. Donahue conducted one of the largest surveys on consumer perceptions of healthcare. He took a "Blue Sky" approach, starting with a broad question and not placing financial or time constraints on the project.

Among other things, he found that "Consumers want healthcare … to stop acting like healthcare." The survey revealed consumers largely feel that healthcare has failed them. He defined consumerism as: determining what patients want, what they need, and what they can do without. The most common emotion patients feel is confusion, and they long for a relationship with their providers.

Expectations of healthcare are extraordinarily high, related to its ability to change and improve lives. Expectations are also high because of the associated cost.

Mr. Donahue discussed understanding the "new payer" – the patient. Patients have much larger out of pocket expenses, with higher deductibles and copayments. Yet, healthcare is disorienting. Patients are faced with many choices, but lack the information to make an informed decision on quality or cost. They see beautiful, large hospital buildings, and don't understand the concept "not for profit."

Healthcare is ripe for disruption. "Who will save healthcare?" The most common answer from consumers is: Amazon! Jeff Bezos, Warren Buffet, and Jamie Dimon have launched a venture to save healthcare entitled "Haven."

Dr. Atul Gawande, the famous surgeon and author, has been named the CEO of Haven. His stated goals include saving money, improving care, and population health. These goals align very nicely with the IHI's (Institute for Healthcare Improvements) "triple aim." Dr. Gawande has stated that "this will take time," but Haven will certainly disrupt healthcare in a positive way by embracing consumerism and improving care delivery.

Sharon Merrick and Matt Popovich followed the presentation with a lecture entitled: "Minding Your Ps and Qs: Payment and Quality Initiatives for Your Practice in 2020."

Mrs. Merrick began by providing updates on coding for 2020. Pain medicine has revised codes (CPT codes 64400-64450), new codes (CPT code 64451, 64454, 64624, and 64625), and deleted codes (64402, 64410, and 64413).

She also discussed changes to the Modifier 51 exempt list. Modifier 51 is used when "multiple procedures, other than E/M services, are performed at the same session by the same individual." Subsequent procedures performed on the same day could be reimbursed less. CPT codes 36620 (insertion of an arterial line), 31500 (emergency intubation), and 93503 (insertion of a Swan-Ganz catheter) are no longer on the exempt list. In other words, they could potentially be paid less when performed on the same day as other procedures, but we will have to see if payors make changes.

Mrs. Merrick also detailed changes to office and outpatient Evaluation and Management (E & M) codes, effective in 2021. New patient codes will go from 5 levels to 4. Documentation requirements change, and reimbursement increases. Notably, the Centers for Medicare and Medicaid Services (CMS) is projecting a decrease to anesthesia reimbursement as a result.

Changes to Medicare reimbursement must be revenue neutral, and increasing payments for some codes require decreasing reimbursement for others. The ASA is in communication with CMS in an attempt to mitigate the impact.

Mr. Popovich focused on the Quality Payment Program (QPP). Much of the program remains the same in 2020, with some notable

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changes. The payment adjustment to 2022 payments, based on 2020 performance, now increases to +/- 9%. Although positive adjustments are likely to be smaller, negative adjustments for those who are eligible and don't participate successfully will be 9%.

The question you should be asking yourself now is not whether you can afford to participate, but whether you can afford not to! Most providers participate in the Merit Based Incentive Payment System (MIPS), but an increasing number of clinicians are enrolled in Alternative Payment Models (APMs). Scoring thresholds have increased in 2020, making it more difficult to earn a positive adjustment. Facility Based Scoring remains an option for many anesthesia providers. For facility-based providers, CMS will look at your hospital's Value Based Purchasing (VBP) score and automatically use it, should it be higher than your QPP score.

One of the primary challenges facing groups in today's hypercompetitive employment market is staffing. Dr. Stan Stead gave a fascinating lecture entitled: "Working Hard, Hardly Paid: How Current Compensation Plans Are Wrecking Clinical Practice."

Many practices receive financial subsidies from hospital partners. Dr. Stead talked about the Fair Market Valuation (FMV) process in great detail. He also discussed hospital expectations once a stipend is paid. Increasing financial pressure on groups necessitates measuring productivity and using data to manage more efficiently.

However, simply looking at total units billed can be misleading, since anesthesiologists practice in a variety of settings, and some work in a care team, while others use physician only models. Although it's important to consider productivity, most compensation plans today include a base salary, with some variable compensation tied to quality or performance metrics.

One of the most novel and innovative presentations included a panel of experts discussing the use of artificial intelligence in healthcare: "Artificial Intelligence, Machine Learning and Other Advanced Computing—Can They Improve Patient Care and the Business of Health Care?"

Speakers discussed both the current state of artificial intelligence and the future direction of development. Dr. Brian Rothman asked the audience, "Do we want computers to replace us?" He envisions future applications in anesthesia practice where computer algorithms augment human decision making. In the flight industry, this is referred to as "detect, diagnose, and predict."

Dr. Matt Levin described work being done at Mount Sinai Medical Center in New York. Computer programs screen patient information in the electronic health record and alert providers to risk.

For example, algorithms screen for malnutrition, deterioration, or fall risk. Alerts sent to providers allow them to prioritize their work and focus on at risk patients sooner. This has led to improved patient outcomes.

Dr. Vesela Kovacheva has taken it one step further at Brigham and Womens Hospital in Boston. She has designed a computer algorithm to sense low blood pressure in patients having caesarean sections. If the patient's blood pressure decreases, the computer directs a phenylephrine infusion pump to deliver a dose of medication.

This closed looped system truly demonstrates the use of artificial intelligence in healthcare. Human oversight is still required, but artificial intelligence assists physicians in providing better care. Unlike "Hal" in 2001 A Space Odyssey, computer assisted decision making and management will compliment human management in healthcare.

The fight between Connor McGregor and "Cowboy" Cerrone was over quickly. Whether from a lack of preparation or focus, Cowboy seemed overmatched.

In today's rapidly evolving healthcare environment, one must be prepared for the conflicts and challenges ahead. As Mike Tyson famously quipped: "Everybody has a plan until they get punched in the mouth."

Attendance at the ASA's Practice Management meeting is essential for anyone engaged in the business of healthcare. ASA President Mary Dale Peterson commented: "This year's PM2020 conference attendees were incredibly engaged with a full house from 7:15 am, with our keynote speaker on consumerism until the close of later afternoon roundtables where participants shared and learned from each other.

"One of my favorites was the panel on diversity and practical steps that a department can take to attract more candidates and select them in a more egalitarian manner. This is really a competitive advantage in this time of workforce shortages."

Mark your calendars now and plan to attend PRACTICE MANAGEMENT 2021 on January 29-31, 2021, once again at the Paris Las Vegas.

If They Asked Me, I Could Write a Book

By Paul Rein, DO

The 1940 musical Pal Joey had a great song, "I could write a Book". That title is apropos as to what I could write about the COVID19 pandemic. I've been around longer than most of you, but this event is unrivaled as to what it has done to America, and hopefully, as I have said to many people during training: "Mistakes give you experience, and experience prevents mistakes." The most difficult part of writing this is to try and be brief without writing a 200-page essay.

When this infection began, we knew it was a corona virus. The previous serious corona infection we battled was SARS-CoV. That began in 2002, and we were expecting a disaster. In total there were 8,422 cases, with an 11% fatality rate. Mysteriously, it disappeared in 2004, never to return.

Fast forward to late 2019, and now we have COVID19. A brand new infection, no one has had any experience treating, diagnosing and prognosticating. We had "experts" pontificating as if they knew what was going to happen. We had the Surgeon General tell us we don't need to wear masks. We had Dr. Fauci tell us as late as 2/29/2020 that there wasn't anything to worry about.

Fast forward to June 4, 2020 and we see how expert we were.

Thus lesson 1 - The smartest people can say: "I don't know."

Instead we saw virtually three months of the blame game. As we listen to so many of the experts blame everyone for the infection, the reality is this was a brand new infection for humans, and they should have said, "I don't know", and do the right thing regarding what we did know about preventing infection spread.

The blame game became political when Donald Trump began advocating for the prophylactic use of hydroxychloroquine, azithromycin and zinc. Magically, two studies appeared, one in *Lancet* and another in the *NEJM* about the outright danger of those drugs to treat COVID19.

Amazingly what happened is that both journals recently retracted the studies. *Lancet* said: "Due to this unfortunate development the authors request that the paper be retracted."

The study in *Lancet* was purportedly based on patient data from 671 hospitals on six continents and reported a higher mortality if taking the drugs. The source of the data was a company called Surgisphere. This is basically a fake company, with involvement with one of the authors. The get in touch link of their website directs you to a WordPress template for crypto currency.

That leads us to lesson 2 - If something sounds too good to be true, it usually is.

Just because a study is in a so-called peer review journal doesn't mean it is correct. When I first read this and saw how many hospitals were involved, and on six continents, I wondered, how the heck did these guys collect so much data from all over the world? Obviously, those that investigated thought the same thing, way too much data so quickly on this subject. I'm sure there will be more fallout from this. If something sounds too good to be true, it usually is.

Lesson 3 - Control what you can control.

Hopefully this lesson will be one that not only our public health and primary care physicians will get, but all of us will get. We, in the United States of America, have a very unhealthy population. The most at risk to die from this infection were the elderly, not a controllable feature.

Importantly, we quickly learned those with co-morbidities, such as obesity, hypertension, diabetes, COPD, and more, were also high risk. Many of those conditions are brought on by poor choices.

We have a huge portion of the population that is obese (BMI>30); and we have way too many who are morbidly obese (BMI>40). Most of this is by bad personal decision. This leads to some of the above medical conditions. Tobacco abuse is a voluntary decision supported by the government because of money. If we care about public health, tobacco would be either banned or have a large tax placed on a pack of cigarettes.

Not mentioned above, but very risky for one's health, is substance abuse, which also increased risk of dying from this infection. What better example than the COVID19 infection is there to show patients why it is so important to get yourself as healthy as you can.

Lesson 4 - The Power of Positive Social Relationships and Social Interaction.

We know that there are three important things to prevent Alzheimer's: Good diet, aerobic exercise, and positive social relationships. We also quickly learned what happens to people when they socially isolate by quarantining. Whether you think it's right or wrong, it has a major effect on people when they are not able to have positive social interaction.

We chose to not allow people in long-term care facilities, or non-COVID patients in hospitals to have visitors, that could easily be protected. That isolation of these people plays a negative role in their well-being. We could have easily changed that policy. Hopefully we have learned a big lesson about the importance of positive social relationships for all of us.

Lesson 5 - Social media is not where one acquires scientific information.

Arguably, social media is the biggest cause of social unrest and division in this country. It is a place where people often show their true self by expressing outrageous opinions and name calling that they would never do in face to face conversation. Not only do we often seen unfounded healthcare claims, but we see many other claims that is leading us down a path of division and unrest. We know the lesson learned, but how do we change it?

There are many more lessons, some of them too complicated to discuss in this venue. Hopefully for all us, this infection is a once in a lifetime occurrence. The sooner we can get back to a normal life, the better off we will all be. Hopefully this pandemic will give us the experience to prevent the next potential mistake.

virginia society of anesthesiologists

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