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SPRING 2021: PATIENT SAFETY & EDUCATION

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Feature Article



Anesthesiologists and Serious Illness Discussions in the COVID-19 Pandemic

Good communi-

cation is a hallmark

of medicine that

has spanned centu-

ries, colloquialized

into the physician's

"bedside manner"

which patients and

their families val-

ue dearly. Indeed,

having this skill

By Vishal Yajnik, MD, MS

Assistant Professor of Anesthesiology Division of Critical Care VCU Health System, Richmond, VA



Dr. Vishal Yajnik

can certainly facilitate the smooth incorporation of modern medicinal science into personalized care and understanding for an individual patient.

As anesthesiologists, we understand the value of this element in our profession. We work to build rapport with our patients, often in the acute perioperative setting, without the benefit of having spent time with them in clinics or other avenues that some of our colleagues in other specialties have. We seek to understand not only our patients' medical problems, but fears and concerns in undergoing anesthesia and surgery, and these conversations frequently highlight how momentous an occasion surgery can be for an individual.

Discussing code status for patients, especially those who bear serious illness, is a challenge that we face frequently as stewards of patient autonomy in the periop-

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Implementation of Delirium Screening in Intensive Care Unit Patients

By Michael Kazior, MD

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Dr. Michael Kazior



Dr. Daniel H. Gouger

Anyone who has ever worked in the intensive care unit likely has memories of a delirious patient. This patient probably had active hallucinations, restraints due to violent behavior. and didn't recognize loved ones or their current surroundings. This is also the most common depiction seen in the mainstream media on television and movies, however, this hyperactive delirium is not the most common type of delirium.

Delirium is a disturbance in atten-

tion and awareness with an acute onset and

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Congratulations to our newly elected board members!



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JPDATE

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The *VSA Update* newsletter is the publication of the Virginia Society of Anesthesiologists, Inc. It is published quarterly. 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 • brooke@gysahq.org.

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President's Message

Patient Safety at the Forefront of Anesthesiology

By Marie Sankaran Raval, MD

VSA President Assistant Professor of Anesthesiology Division of Pediatric Anesthesiology VCU Health System, Richmond, VA

Since moving

to Richmond in

2012, the VSA has

played an integral

role in my profes-

sional career and

I am so excited to

serve as your next

As a pediatric anesthesiologist

at the Children's

Hospital of Rich-

VSA President.



Dr. Marie Sankaran Raval VSA President

mond, I have seen firsthand the incredible power of working together and advocating for issues that affect our specialty and the practice of medicine. I have gained a huge sense of community and have witnessed the power of advocacy as we have gained headway in various legislative topics, including defeating the repeal of the medical malpractice cap and adding an expiration date to nurse practitioner legislation.

As we look ahead, our goal is to continue to provide safe anesthesia to all Virginians and to that end, I hope to engage you all in advocacy for our specialty and encourage you take leadership roles in improving patient safety in your own practice. We are so much stronger together than apart.

Patient safety and education are important topics, not only in anesthesiology, but in all of medicine. We are fortunate to be in a medical specialty that puts the safety of our patient population at the forefront of our job description. It is inherent to who we are as anesthesiologists.

To that end, the American Society of Anesthesiologists (ASA) has the Committee on Patient Safety and Education, through which the ASA carries out its vision of "worldwide, safe anesthesia practice." The Committee on Patient Safety and Education (CPSE) has multiple resources on the ASA website, available to all members, including a Safety Handbook, Emergency Manuals/Checklists and various Decision Aids to assist in the safe practice of anesthesia.

The CPSE has also been vocal in the *ASA Monitor* on multiple topics important to our everyday practice, such as persistent opioid use after surgery, anesthesiology, and pharmacy, and creating a culture of safety.

A culture of safety is essential to any department and the Agency for Healthcare Research and Quality (AHRQ) defines it as a "collaborative environment in which skilled clinicians treat each other with respect, leaders drive effective teamwork and promote psychological safety, teams learn from errors and near misses, caregivers are aware of the inherent limitations of human performance in complex systems (stress recognition), and there is a visible process of learning and driving improvement through debriefings."

The work environment must be supportive and individuals must be willing to share experiences to better serve and care for future patients and prevent errors.

As anesthesiologists, we are also fortunate to have the Anesthesia Patient Safety Foundation (APSF), a nonprofit corporation, created in 1985 with a vision "that no patient shall be harmed by anesthesia care."

The APSF has worked tirelessly since its inception, alongside the ASA, to foster a culture of safety in anesthesia and improve overall patient outcomes. While the practice of anesthesia has seen a tremendous decrease in adverse outcomes through this collaboration, the work is not complete.

Patient safety is constantly threatened by efficiency pressures, human error, and equipment/systems failures. We must continue to work together and put our patients first.

With these goals in mind, as your VSA president, I pledge to continue to advocate for patient safety and our specialty. I encourage you all to reach out to me at marie.sankaranraval@vcuhealth.org with any issues that are important to you and your practice.

We want to hear from you. We also appreciate all of the generous donations to the VaSAPAC and encourage all members to donate. No gift is too small and together, we can make a difference in the healthcare of all Virginians.

Meet More of VSA's Volunteer Leaders

ASA Representatives

Our ASA Director is Jeffrey A. Green, MD, MSHA, FASA; and our ASA Alternate Director is Brooke Trainer, MD.

Our ASA Delegates are Casey Dowling, DO, FASA; Mike Fowler, MD, MBA; Jeffrey Green, MD, MSHA, FASA; Brian McConnell, MD, FASA; Craig Stopa, MD; Marie Sankaran-Raval, MD; Lynda Wells, MD; and Brooke Trainer, MD

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Physician Anesthesiologists and the Quadruple Aim

By Jeffrey Green, MD, FASA

VSA Immediate Past President Boyan-Keenan Professor of Anesthesia Safety VCU Health System, Richmond, VA



Dr. Jeffrey A. Green VSA Immediate Past President

ing on February 2, I had the pleasure of handing over the gavel to the new VSA President, Dr. Marie Sankaran Raval and presiding over the election of your new officers, directors, delegates and alternates.

At the VSA

membership meet-

I couldn't be more excited for the future of the VSA with this new group of outstanding leaders. I can't help but think about some of the former physician anesthesiologist leaders in Virginia and their connections to the theme of the current newsletter.

For example, former Chairs of the VCU Department of Anesthesiology, Paul Boyan and Dick Keenan, collaborated on their seminal article in JAMA in 1985 on Cardiac Arrest due to Anesthesia, increasing our awareness of adverse events ultimately resulting in improved patient safety. These leaders in Virginia, as well as others, continue to inspire physician anesthesiologists' interest and research in quality improvement and patient safety.

The Quadruple Aim is a term developed by Lucian Leape and colleagues that builds upon the preceding term "Triple Aim", first described by Don Berwick and colleagues in 2008.

The Triple Aim is designed to provide a framework representing value in healthcare. The Triple Aim is centered on three goals: improving the individual patient experience, improving the health of populations, and lowering the cost of healthcare.

The Quadruple Aim adds another critical dimension: improving the experience

of healthcare personnel while providing care. Physician anesthesiologists are well equipped and well positioned to lead healthcare organizations in the pursuit of the Quadruple Aim because of our grounding in patient safety.

The theme of this volume of the newsletter is quality improvement and patient safety. Quality improvement and patient safety are the underpinnings of the first Aim, improving the individual patient experience. Without quality care that is also safe, there cannot be a successful patient experience.

Anesthesiologists are trained to understand human error and systems improvement. These concepts are fundamental to our specialty and are built in to what we do every day. Anesthesiology recognizes that humans are error prone, therefore anesthesia systems and processes are built to overcome human errors by preventing these errors from reaching the patient.

It is not surprising that physician anesthesiologists can frequently be found leading organizational efforts around safety and quality. Although anesthesia is now generally thought to be safe, it wasn't always this way. Today we continue to strive for improvements in patient safety.

In April of 1982, ABC aired a special on anesthesia on 20/20. In the episode, it was stated that there was a "shocking number of anesthesia mishaps" and "6,000 die or suffer brain damage" from anesthesia every year. This was a wake-up call in the anesthesiology community, prompting the adoption of safety standards by the ASA and other anesthesia organizations and leading to the birth of the Anesthesia Patient Safety Foundation.

Ever since, anesthesiology has been credited with being the leading specialty in the development of patient safety. In the 2000 Institute of Medicine report, To Err is Human: Building a Safer Health System, anesthesia was credited with being a "model of safety" and an "area in which very impressive safety improvements have been made."

Another important development in the history of anesthesia patient safety is the creation of the ASA Closed Claims Database. This index of resolved medical malpractice claims involving anesthesia, helped track and trend the injuries and safety events in anesthesiology reported from insurance companies. It has demonstrated significant reductions in the rates of death and brain damage related to anesthesia, as well as recognize the importance of neurologic injury during anesthesia. It also led to the development of the ASA Difficult Airway Algorithm.

Areas more recently recognized by the Closed Claims Project in need of continued safety improvement include airway fires, high risk cases in non-OR areas, neurologic injury in obstetrics, and risks of chronic opioid pain treatment.

I am particularly proud to be a member of a specialty that makes patient safety and quality improvement a pillar of our practice. Physician anesthesiologists make a huge difference to patients every day while we shepherd them through difficult procedures, although we often fly under the radar of recognition among our physician colleagues and patients alike.

Despite the under acknowledgment, we should all be pleased to be known as champions for the Quadruple Aim.

Now that my term as president has come to an end, I want to take the opportunity to thank the entire VSA Board and officers for their support. I also want to thank the teams at Ruggles Service Corporation and Commonwealth Strategies for their hard work and dedication to the anesthesiologists in Virginia.

In particular, I want to thank Emil Engels for his service to VSA as the ASA Director. I am pleased to have the opportunity to continue to serve Virginia anesthesiologists as the new ASA Director and I pledge to continue to represent your interests at the national level.

If there is anything else the VSA or ASA can do to improve your experience as a physician anesthesiologist in the Commonwealth, please reach out to me at Jeffrey. green@vcuhealth.org.

Safe Perioperative Pathways for Balancing OSA and Ambulatory Surgery

By Alexander J. Skojec, MD

Anesthesia Resident Department of Anesthesiology University of Virginia, Charlottesville, VA



Long lauded as proponents of patient safety, and increasingly so in perioperative medicine, Anesthesiologists exert an invaluable impact on the perioperative management of patients with

Dr. Alexander J. Skojec

obstructive sleep apnea (OSA). While the prevalence of OSA and OSA-related diseases (e.g. hypertension and obesity) surge in the United States, anesthesiologists are commonly being asked to provide services in outpatient surgical centers¹⁻³. Because these two trends converge, we must identify patients with OSA, diagnosed or suspected, prior to the day of surgery to medically optimize this high-risk population and to recommend the location best suited for providing their anesthesia.

At the University of Virginia (UVA), all patients scheduled for elective surgery at our outpatient surgical center are screened for OSA during the preoperative surgical clinic visit. This screening process includes administering a "snoring, tiredness, observed apnea, high BP, BMI, age, neck circumference, and male gender" (AKA STOP-Bang) questionnaire to each patient, which focuses on common risk factors.4 Patients with a STOP-Bang score of 3+ are automatically flagged as potentially high risk for OSA, and those scoring 5+ are presumed to have moderate to severe OSA until proven otherwise. Both groups are offered a sleep study prior to their elective procedure.

Likewise, due to risk of perioperative hypoxia and hypoxemia, STOP-Bang scores inform appropriate location choice for elective surgery. Patients with scores of 5+ or with OSA diagnosed by sleep study (regardless of treatment compliance), receive special attention prior to scheduling them



for outpatient surgery. Patients undergoing MAC, Bier Block, or local-only anesthetics are exempt from our pathways and proceed for elective outpatient surgery. However, patients with known or suspected OSA requiring peripheral nerve blocks, neuraxial anesthesia, and/or general anesthesia, as well as those likely to require opioids for post-operative pain control, require individualized care plans involving the UVA Pre-anesthesia Evaluation and Testing Center (PETC).

During the PETC visit, patients with known or suspected OSA are evaluated for their procedure's appropriateness at the outpatient surgery center based on 1) the type of procedure and the expected type of anesthesia, 2) the potential need for respiratory-suppressing medications, 3) their OSA severity, 4) their compliance with OSA treatment (e.g. CPAP), and 5) their other comorbidities (cardiopulmonary issues, chronic narcotic use, etc). This clinic appointment serves as an opportunity to help optimize relevant comorbidities (weight, blood pressure, chronic cardiopulmonary diseases), discuss postoperative pain control strategies (predominantly non-opioid modalities), and to counsel patients about the risks of OSA. If the diagnosis of OSA remains in question, they are offered and encouraged to participate in a sleep study. Patients with known or suspected OSA undergoing airway surgeries under general anesthesia (except tonsillectomy and adenoidectomy in children > 36 months) or upper abdominal surgeries (except for laparoscopic cholecystectomy) are avoided in the ambulatory setting.

Patients with OSA who are also compliant with nightly CPAP therapy may undergo elective procedures at the outpatient surgery center if they are medically optimized, bring their CPAP device with them, and otherwise meet the criteria listed above. Patients with known OSA who are NOT compliant with therapy, or those patients with STOP-Bang scores of 5+, must meet several additional criteria to have their surgery considered safe at the outpatient surgery center. In general, patients undergoing minor procedures under minimal sedation/opioids may be considered, though exceptions exist. Utilizing regional and neuraxial techniques, as well as minimizing intraoperative sedation and postoperative opioids, are preferred outpatient strategies. These patients are also preferentially scheduled for earlier operative times given the increased risks of prolonged emergence from anesthesia and postoperative hypoxemia.

Postoperatively, all patients with suspected or confirmed OSA must be monitored closely in the post-anesthesia care unit (PACU). All episodes of apnea, bradypnea,

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Editor's Message

Promoting A Positive Safety Culture in Healthcare Organizations

By Brooke Trainer, MD, FASA

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Dr. Brooke Trainer

Disagreements regarding medical management of patients between medical professionals will exist at every institution and in all types of situations. What is important, however, is the ability of each provider to feel comfortable in voicing those

differing professional opinions. When the ability to communicate is limited or suppressed, patients can suffer.

Medicine is not always a science; it can be an art. Discoveries are made every day disputing therapies we once believed to be superior and contradicting our initial understanding of their application. For example, we once believed ventilating patients with tidal volumes of 10ml/kg was necessary to prevent harm from atelectasis and possible pneumonia. We now realize that in some patients, this volume can be excessive and lead to harm, so we accept a lower tidal volume of 6ml/kg to be much more favorable.

Because our understanding of medical science ebbs and flows, so must our ability to communicate our thoughts and concerns, openly and freely. Institutions must foster an environment of psychological safety which encourages others to feel safe communicating issues and speaking up with concerns. (1) A positive safety culture allows medical providers to act decisively and expediently to protect patients and employees.

A positive safety culture within a health care system is an essential component of improving patient safety and reducing errors. The Joint Commission defines safety culture as "the collection of beliefs, values, attitudes, perceptions, competencies, and



patterns of behavior that determine the organization's commitment to quality and patient safety". (2) This can be accomplished by encouraging transparent, non-punitive approaches to speaking up and reporting. Moving to a "just culture" where a focus is placed on system faults contributing to adverse events rather than individual blame can improve an organization's safety culture.

Environments where unprofessional behavior is allowed to persist negatively impact patient outcomes and interfere with another medical provider's ability to safely care for patients. Take for example, an argument between a surgeon and intensivist regarding a patient in the ICU after surgery. Both providers are equally invested in the recovery of that patient and both want the best possible outcomes. However, what happens when the two providers disagree regarding the medical management of the patient? Who "wins"? In the best case scenario, both providers are able to openly discuss their plans with one another, are cordial and respectful of one another's input, consider the alternative perspective, and then together through compromises, additional evidence, or a third opinion (tie breaker), decide the next best course of action to pursue for the patient. In the end, the patient wins because he/she has multiple experts openly discussing the next best course of action for their care, which ultimately contributes to the mutually shared goal of better outcomes for the patient.

In contrast, when unprofessional behavior is tolerated in an organization it negatively impacts patient safety. Providers may feel intimidated and afraid to speak up, and feel their clinical expertise is undermined or dismissed. Medical decision making can be more challenging because providers begin to question themselves and become less likely to speak up with concerns. Rather than feel humiliated, providers in hostile and degrading environments may choose to defer to other's medical decisions, even if they do not agree with them.

There is no room for authoritative dictatorship in medicine. Communication cannot be one-sided - it ties the hands of other providers and makes them feel vulnerable and frozen between not wanting to upset an intimidating, aggressive, and authoritative provider, and doing the right thing for the patient. Providers must feel safe and be encouraged to challenge a plan with which they are in disagreement. The ability to freely discuss ideas, evidence-based practice

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and hypoxia (defined as persistent oxygen saturation less than 90%) are reported to an attending anesthesiologist. Opioids and other respiratory depressants are minimized. Consistent use of CPAP (if available) is emphasized, and CPAP is advised for the entire time the patient is requiring postoperative opioids. Patients are always provided with education postoperatively, especially as it pertains to the type of anesthesia received and possible adverse outcomes. Should any concerns arise during their perioperative course, there remains a low threshold to be considered for admission.

The prevalence and severity of OSA continues to increase across the United States, and the frequency with which patients with OSA require anesthesia also continues to increase.⁶ For reasons stated in many other review articles, patients with sleep apnea require meticulous preoperative optimization, individualized intraoperative management, and close postoperative surveillance due to the multiple and profound implications this disease has on perioperative morbidity and mortality.^{6.9}

As the demand for anesthesia services at outpatient surgery centers continues to increase, so too does the demand to provide anesthesia services for patients with known or suspected OSA going for ambulatory surgery. UVA's pathway for managing our patients with OSA, especially for elective surgery, provides an example of the expected vigilance, leadership, and hallmark dedication to patient safety for which Anesthesiologists are known.

Special thanks to Dr. Ashley Shilling (Director of University of Virginia Outpatient Surgical Center) and Dr. Lee Kassell (Medical Director of University of Virginia Pre-anesthesia Evaluation and Testing Center) for their invaluable assistance with this topic. The discussed guidelines are featured in the policy bulletin titled "Guidelines For The Management Of Obstructive Sleep Apnea (OSA) Or Suspected OSA Patients Coming For Outpatient Surgery At The University Of Virginia," last updated December 31, 2020.

References

- Mills KT, Stefanescu A, He J. The global epidemiology of hypertension. Nat Rev Nephrol. 2020 Apr;16(4):223-237. doi: 10.1038/s41581-019-0244-2. Epub 2020 Feb 5. *PMID*: 32024986.
- Inoue Y, Qin B, Poti J, Sokol R, Gordon-Larsen P. Epidemiology of Obesity in Adults: Latest Trends. *Curr Obes Rep.* 2018;7(4):276-288. doi:10.1007/s13679-018-0317-8
- 3. Garvey JF, Pengo MF, Drakatos P, Kent BD. Epidemiological aspects of obstructive sleep apnea. *J Thorac Dis.* 2015;7(5):920-929. doi:10.3978/j. issn.2072-1439.2015.04.52
- 4. Chung F, Yegneswaran B, Liao P, et al. Stop Questionnaire: A Tool to Screen Patients for OSA. *Anesthesiology* 2008; 108:812-21.
- Chung F, Abdullah HR, Liao P. STOP-Bang Questionnaire: A Practical Approach to Screen for Obstructive Sleep Apnea. *Chest.* 2016 Mar;149(3):631-8. doi: 10.1378/chest.15-0903. Epub 2016 Jan 12. PMID: 26378880.
- Raveendran R, Chung F. Perioperative consideration of obstructive sleep apnea in ambulatory surgery. *Anesthesiol Clin.* 2014 Jun;32(2):321-8. doi: 10.1016/j. anclin.2014.02.011. PMID: 24882120.
- 7. American Society of Anesthesiologists

Task Force on Perioperative Management of patients with obstructive sleep apnea. Practice guidelines for the perioperative management of patients with obstructive sleep apnea: an updated report by the American Society of Anesthesiologists Task Force on Perioperative Management of patients with obstructive sleep apnea. *Anesthesiology*. 2014 Feb;120(2):268-86. doi: 10.1097/ALN.00000000000053. PMID: 24346178.

- Fahlenkamp A, Rossaint R, Coburn M; American Society of Anesthesiologists Task Force. Perioperatives Management von Patienten mit obstruktiver Schlafapnoe : Update der Praxisleitlinien der American Society of Anesthesiologists Task Force [Perioperative management of patients with obstructive sleep apnea : update on the practice guidelines of the American Society of Anesthesiologists Task Force]. *Anaesthesist.* 2014 Jun;63(6):511-3. German. doi: 10.1007/ s00101-014-2338-3. PMID: 24851836.
- 9. Chung F, Memtsoudis SG, Ramachandran SK, Nagappa M, Opperer M, Cozowicz C, Patrawala S, Lam D, Kumar A, Joshi GP, Fleetham J, Ayas N, Collop N, Doufas AG, Eikermann M, Englesakis M, Gali B, Gay P, Hernandez AV, Kaw R, Kezirian EJ, Malhotra A, Mokhlesi B, Parthasara-thy S, Stierer T, Wappler F, Hillman DR, Auckley D. Society of Anesthesia and Sleep Medicine Guidelines on Preoperative Screening and Assessment of Adult Patients With Obstructive Sleep Apnea. *Anesth Analg.* 2016 Aug;123(2):452-73. doi: 10.1213/ANE.000000000001416. PMID: 27442772; PMCID: PMC4956681.

Safety Culture, from page 6

suggestions, and alternative management strategies, along with the willingness of other providers to listen is all in the best interest of the patient.

When caring for a patient, a provider should expect a level of psychological safety to exist between two professional colleagues, which fosters a culture of speaking up and maintaining open lines of communication. Ultimately, organizations who promote a positive organizational climate contribute to higher job satisfaction among employees, decreased burnout, fewer medical errors, and an overall improved culture of safety. (1)

References

1. "Effective Leadership and Patient Safety Culture" Albright-Trainer B.; Dayal R.; Agarwala A.; Pukenas E. 2020 Anesthesia Patient Safety Foundation Newsletter pp. 44-46

2. "The Essential Role of Leadership in Developing a Patient Safety Culture" *Joint Commission Sentinel Event Alert* 57, s.l.: Department of Corporate Communications, 2017, The Joint Commission. Sentinel Event Alert

Perspective on the Introduction of Pharmacy to a Pre-Operative Anesthesia Clinic

By Karishma Popli, BS, MBE

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Medication errors account for more than 400,000 in-hospital adverse drug events in the United States each year, costing the healthcare system over \$3 billion annually¹. Over 60% of patients being admitted have at

Karishma Popli

least one medication omission or error, with approximately 11-59% of these errors having the potential to cause harm or an adverse drug event². There is an increasing need to both identify and rectify medication errors to improve patient safety since they are both extremely common and easily preventable. One major strategy for reducing medication errors prior to elective surgeries and subsequent patient admissions, is to have pharmacists perform medication history in pre-operative anesthesia clinics.

As a third-year medical student, I had the opportunity to rotate at VCU Health's PACE (Preoperative Anesthesia, Communication, and Education) clinic where I saw first-hand the benefits of pharmacists. The PACE clinic sees an incredibly high volume of patients of all ages, who are scheduled for a broad mix of complex surgeries that cover most surgical subspecialties. Likewise, patients who come to PACE clinic, often have several advanced medical co-morbidities, which may or may not be well-controlled, and take complicated, high-risk medication regimens that leave room for much error. To improve both patient safety and education, pharmacists have started seeing patients scheduled to stay overnight for 23-hour observation or inpatient after their surgery.

One month after the introduction of the pharmacist-led medication history program in the pre-operative anesthesia clinic at VCU Health, the in-house pharmacy saw over 500 patients. An average of 20 clinic patients per day were scheduled to be inpatient after their



Pictured L to R: Yena Son, VCU SOM '21, Karishma Popli, VCU SOM '22, Dr. Olga Suarez-Winowiski, Director of PACE Clinic, with two of the in-house clinical pharmacists at the PACE Clinic, VCU Health.

surgery and received a medication history by pharmacy. With typically two full-time pharmacists working each day over this month, taking an average of 22 medication histories per day, pharmacy made changes to 249 high-alert medications, as classified by the Institute for Safe Medication Practices (ISMP), and either added, removed, or changed 102 medication allergies during this time period. More results from the medication reconciliation program can be seen in Table 1.

Error Type	Number of Medication Changes
Non-compliance	491
High-alert Medication Changes	249
Medication Allergy Changes	102
Medication Added	1377
Medications Removed	1089
Wrong Medication	55
Wrong/Missing Medication Formulation	196
Wrong/Missing Medication Strength	518
Wrong/Missing Medication Doses	697
Wrong/Missing Medication Dose Frequencies	488

Table 1: Preliminary data on error type and number of medication changes one month after incorporation of the Pharmacist team medication reconciliation program at VCU Health PACE Clinic These preliminary results show the direct benefits of having a pharmacist-led medication history program in the pre-operative outpatient clinic setting to improve patient safety and reduce medication errors perioperatively. These findings are supported by other studies that have shown similar results with the introduction of pharmacy services in pre-operative anesthesia clinics with atrisk patient populations^{3,4}, but no study to date has been done to show the benefits to all-comers in this outpatient setting.

This program has also helped to identify patients who are non-compliant with certain medications that are vital for both their scheduled surgeries and overall well-being. By identifying these patients immediately prior to the provider seeing them in clinic, the provider is able to tailor their visit with the patient to include education on their medication use and encourage them to schedule an appointment with specialists or their primary provider, if necessary, to follow up on the treatment of their medical conditions.

Overall, I believe there is a tremendous impact on patient safety and education by utilizing pharmacy services to conduct medication history in outpatient pre-operative anesthesia clinics to help reduce medication errors and adverse events perioperatively, and I think other clinics would benefit from this introduction as well.

Adults as Learners

By Mark T. Nelson MD, MEd

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and Jean Bailey, PhD

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Dr. Mark T. Nelson



Dr. Jean Bailey

from the perspective of pedagogy) by several characteristics described by Malcolm Knowles in the 1980s. Adults are more internally motivated to learn. Their motivation can result from many sources (promotion, joy, societal responsibility/recognition, and accountability) but largely originates from

of learners, K-12 students usually come to mind. Most of us remember those days well. As we have grown though, we began to see, experience, and value education differently. Almost without our knowing it, we transitioned from child to adult, becoming adult learners.

When we think

Adult learners (described by studies from the perspective of andragogy) differ from children (described by studies



within.

This differs from external motivators experienced in childhood. or even adolescence, such as a desire to please a parent, teacher, etc. Adult learners also have some amount of life experience that needs recognition by the teacher in order to engage the learner; one size will not fit all.

Adult learners are goal oriented; the knowledge or skill they seek is to help them perform, understand, or utilize information better. Their desire to learn is described as practical with explicit endpoints.

Lastly, adult learners need to be respected and will naturally resist what they perceive as forced on them. They also thrive in safe learning environments, where they can test their new knowledge and get feedback to help them learn.

As one can see, these characteristics are specific mostly to adult learners, differentiating them from pedagogical learning experienced by children.

Not only are motivating forces to learn different, but also effective methods of learning are important and specific to this group. Kolbe's experiential learning model, which has gained significant traction in the last half century, describes a process of testing newly acquired knowledge against what the learner already knows. Reflection is a vital component to functionalizing this new knowledge.

Theories describing adult learning are an amalgam. They take into account behavioral, cognitive, experimental, humanistic, and transformative perspectives, with the latter three being constructivist in origin. Constructivism describes the process by which learners create meaning from their observations. Different people can observe the same event but the meaning they construct can be very different, derived from the learners' own experiences.

Transformative learning is derived from critical reflection and confronting a disorienting dilemma. Learning occurs when a person finds her/himself in a dilemma for which the tools they currently possess will not produce a satisfactory solution. Examples include learning to live with a chronic disease or disability, accepting the death of

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Introduction of Pharmacy, from page 8

References

- 1. Aspden, Philip, and Philip Aspden. Preventing medication errors. National Acad. Press, 2007.
- 2. Tam VC, Knowles SR, Cornish PL, Fine N, Marchesano R, Etchells EE. Frequency, type and clinical importance of medication history errors at admission

to hospital: a systematic review. *CMAJ*. 2005 Aug 30;173(5):510-5.

- 3. Haddad N, Paranjpe R, Rizk E, Basit SA, McNamara C, Okoro E, Gilmore J, Liebl M, Swan JT. Value of pharmacy services in an outpatient, preoperative, anesthesia clinic. *Journal of the American Pharmacists Association*. 2020 Apr 15.
- 4. Burda SA, Hobson D, Pronovost PJ. What is the patient really taking? Discrepancies between surgery and anesthesiology preoperative medication histories. *BMJ Quality & Safety*. 2005 Dec 1;14(6):414-6.

Adults as Learners, from page 9

a loved one, and changing perspectives on what was initially deemed an impossibility.

So, what about our residents? Where do they fit in to this schema and how can we help them learn? They certainly lack many of the characteristics of adult learners, but most have some. Many physicians began their journey into medicine as traditional learners before and during undergraduate training. They enter medical school with limited prior learning and life experience.

Motivating factors are often external, sometimes rooted in parental expectation, societal expectation, even happenstance. They often have insufficient experiences of their own to derive internal motivation. They could desire to enter the profession for prestige or from a desire to help others.

While these may or may not be virtuous, they are nonetheless external. It would be unlikely that many physicians made this decision from largely internal motivations. Although we were "goal oriented", with the goal of becoming a doctor, we often lacked a full understanding of just what that meant.

Over time, we more deeply derived a professional identity and only then a need to be recognized as a physician. In truth, the resident learner may be in a class of his or her own and obtaining a passing grade may be motivated both externally, and to some extent, internally.

So then, how do we teach to this group that does not fit neatly into either an andragogy or pedagogy identity? How do we The answer may not lie in what to do but what we refrain from doing. It might be that we remove hurdles or avoid practices that may suppress their adult development and engagement.

begin to rescind the pedagogy-based roots that limit our learners in their new role as adult learners? How do we replace current motivations, creating lifelong learners and ultimately responsible physicians? How do we transcend the compliance so valued in childhood learning with internally derived ownership critical to successful consummation of becoming a physician?

The answer may not lie in what to do but what we refrain from doing. It might be that we remove hurdles or avoid practices that may suppress their adult development and engagement. Our role becomes a facilitator of their development as well as their cognitive knowledge, helping them to find an accountability and responsibility that is personal to them rather than just a compliancy to the rules of the organizations in which they find themselves. This will require time for reflecting, debriefing, and useful formative feedback. Adult learners, by definition, need to be involved in their curricula development as well. They know how they learn, and if this is recognized, their enthusiasm and ownership will be engaged. Lastly, responsibility without authority will serve only to frustrate the adult learner. Over-regulated programs citing "safety" as a motivating factor often hamstring residents. Is it safe to graduate a resident who has experienced very little legitimate responsibility?

If this essay has created more questions than answers, then it has done its job. As residents progress to adult learners, they become more inclusive yet more discerning. They begin to realize that few issues or practices are truly black and white, but rather most are gradations somewhere in between requiring reflection and critical analysis.

It is incumbent on us as teachers to identify and understand the characteristics of andragogy and facilitate the development of adult learning through residency. It is no longer enough to take on parental roles, treating learners as if they were pupils of compulsory education.

Our recognition of this and attempts to frame our teaching in ways that not only produces cognitive change but further facilitates development of adult learners in our residents is essential to our mission as teachers.

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Delirium Screening, from page 1

fluctuating course that is not better explained by another neurocognitive disorder. Simply put, it is a sign of acute end organ dysfunction of the brain, just like low urine output is a sign of kidney dysfunction. We care about delirium because it is associated with longer hospital stays and costs, increased risk of institutionalization after discharge, increased risk of disability, prolonged cognitive dysfunction, and increased risk of death¹.

Unfortunately, delirium is common. For the types of patients that anesthesiologists treat, up to 40% of patients in the post anesthesia care unit (PACU) already have delirium and up to 80% of ventilated patients in the ICU suffer². The bigger the surgery, the higher the risk; patients undergoing cardiac and major abdominal surgery have the highest rates of delirium².

There are three types of delirium: hypoactive, hyperactive, and mixed². Hyperactive is the more traditionally thought of manifestation described above, characterized by restlessness and agitation. However, hypoactive delirium is far more common and dominated by symptoms of drowsiness and inactivity².

Due to the nature of the symptoms, hypoactive delirium is commonly missed in the clinical environment unless daily screening is instituted.

ICU Liberation (ABCDEF) Bundles help reduce delirium, improve pain management, and reduce long term consequences for ICU patients³. A is for assess, prevent, and manage pain. B is for both spontaneous awakening and breathing trials. C is for choice of analgesia and sedation. D is for delirium, to assess, prevent, and manage. E is for early mobility and exercise. F is for family engagement and empowerment³.

The Central Virginia VA Health Care System in Richmond, VA is one of the largest VA hospitals in the country and performs some of the most complex surgery in the whole system - including left ventricular assist devices and heart transplants. There are two traditional ICUs at our hospital, the Medical Intensive Care Unit that houses the medicine and cardiology patients and the Surgical Intensive Care Unit.

In April, a new ICU that specifically treats

Due to the nature of the symptoms, hypoactive delirium is commonly missed in the clinical environment unless daily screening is instituted.

the COVID-19 positive patients opened up. Prior to 2019, many aspects of the ABCDEF bundle were in place, however, there was no delirium screening in any of the ICUs and delirium rates were unknown.

In the Spring of 2019, representatives from both ICUs proposed the project to institute daily ICU delirium screening at our hospital. Several delirium screening tools exist; however, we chose the Confusion Assessment Method for the ICU (CAM-ICU).

The CAM-ICU is the most widely used screening tool in the world because it can be completed quickly, is reliable, and highly validated. The downside is that it assesses the patient at one moment in time, so it must be performed again if there is a change in mental status.

ICU leadership approved the project and set the baseline of performing the CAM-ICU twice a day, once on day shift and once on night shift (0800 & 2000), on all ICU patients. The goal was to have greater than 90% compliance in each unit.

Before education could start, the IT department created a space in the medical record to document the delirium assessment. Once this was achieved, we identified nurse champions in both ICUs to help educate the rest of the nursing staff on how to perform and document the CAM-ICU. Education for the nursing staff took place over the next few months with the help of the nurse champions and intensivist staff.

Audits of the chart began in October 2019, with continuing education as we received data. In April of 2019, there were zero CAM-ICU screens performed and by October of 2019, 78% of SICU patients received screening and 69% of MICU patients.

Different areas of improvement dealt with simply charting the CAM-ICU the correct way, to getting nursing to perform the screening on intubated patients during their spontaneous awakening trials. A lot of education had to be done to show them that the patients could safely be woken up and communicated with at length to perform the screening. The most recent data from July 2020 shows us meeting our goal with 91% of SICU patients and 98% of MICU patients receiving delirium screening.

Of the patients from each service that were admitted to the ICU, we found the following rates of delirium at our institution: 33% of MICU patients, 9.3% of cardiology patients, 21% of spinal cord injury patients, 6.7% of cardiothoracic surgery, 17% of general surgery, 16% of surgical oncology, 13% of neurosurgery, and 14% of vascular surgery.

Future directions for this quality improvement project are to continue education in the current units and expand into newer areas. This includes the opening of a new ICU specifically for the treatment of COVID-19 patients.

Given the isolation required to treat these patients and protect others, they are at high risk of ICU delirium. We need to identify the patients at risk, implement prevention strategies, and educate providers and nurses on proper treatment.

We have come a long way at our hospital and we believe this project has improved the care of Veterans in the Commonwealth of Virginia.

References

- 1. Pandardipande PP et al. Long-Term Cognitive Impairment After Critical Illness. *NEJM*. 2013;369:1306-16.
- 2. Vasilevskis EE et al. Epidemiology and Risk Factors for Delirium Across Hospital Settings. *Best Pr Res Clin Anes*. 2012;26:277-87.
- 3. Hayhurst C. Intensive Care Unit Delirium: A review of Diagnosis, Prevention, and Treatment. *Anesthesiology*. 2016; 125:129-41.

Serious Discussions, from page 1

erative setting. After all, cardiopulmonary resuscitation (CPR) was developed in the perioperative literature in the mid-20th century. It is important to acknowledge that the discussion entails more than simply rescinding Do Not Attempt Resuscitation (DNAR) for a given operative case, and requires shared decision making with input from the patient or surrogate decision maker, surgeon, and anesthesiologist. And all too often, this discussion occurs at the bedside in the preoperative area, immediately prior to surgery, if it happens at all.

In 1991, the Patient Self Determination Act required healthcare institutions to provide advanced healthcare directive information to patients, including acknowledgment of a patient's right to refuse care. Prior to this, DNAR orders were routinely suspended preoperatively. Nonetheless, advance directives are frequently of limited value when approached without a complex discussion in the perioperative setting. They are often boilerplate and refer to decisions regarding prolonged artificial life-sustaining therapy that are not pertinent to events in the operating room.

The importance of having these discussions is not lost on perioperative caregivers. Our institution conducted a survey in early 2020, in which 91% of surgeons, anesthesiologists, and CRNAs who responded felt that identification of patients with DNAR code status prior to surgery was extremely important, but identified practice opportunities to improve these discussions.

A pilot program, headed by our Department of Palliative Care Medicine, was born and continues, involving more focused discussion and documentation of DNAR rescindment and reinstatement (specifically, when and where), following discussion with the patient and/or surrogate decision maker. More work remains to be done, but this is a model that can improve patient safety and satisfaction at every institution that does not have a streamlined approach to this complex process.

As we continue to take care of older, sicker patients in the operating room and beyond, the COVID-19 pandemic has strained our capacities for these important discussions further. Anesthesiologists and perioperative staff throughout the country, and the world, struggle along with their patients in a time As we continue to take care of older, sicker patients in the operating room and beyond, the COVID-19 pandemic has strained our capacities for these important discussions further.

where family visitation policies have been significantly curbed in an effort to stem the spread of disease. The communication and comfort that family provides is certainly limited, and our physician and nursing staff have strived to rise to a daily challenge in this respect.

Those of us in anesthesiology who practice as intensivists in the Commonwealth and around the world have also met our share of further challenges with the pandemic. From providing front-line care for patients afflicted with the most severe and life-threatening cases of COVID-19, to using our unique knowledge and position to help organize and allocate resources at an institutional level, we have worked tirelessly with the support of our fellow anesthesiologists as well as interdisciplinary colleagues. Highlighted through this battle is the plight of intensive care patients, more commonly affected by limited or non-existent decision-making capacity, and thus most vulnerable to limited family visitation policies.

For ICU patients, indeed, days can turn into weeks, and even months of hospitalization - this is unfortunately met with diminishing improvement in outcomes. The importance of family discussion in critical care has become increasingly apparent and accepted, highlighted by its inclusion in the ABCDEF ICU liberation bundle supported by the Society of Critical Care Medicine. In modern critical care medicine, it has become common practice to conduct multidisciplinary team rounds at the bedside, with family members and surrogate decision makers present and encouraged to participate. The value in this process is understandably beneficial to families, who

are able to ask questions and give input directly to clinical decision makers; it is an equally beneficial process for the ICU team. This interaction allows us the privilege as clinicians to gain insight into a patient's medical history, compliance, social support structure, culture, and values that are so vital to serious illness discussions.

With the COVID-19 pandemic, intensivists, and by extension, our patients, have largely been deprived of this privilege. Patients who so benefit by having the familiar faces of their families and friends at the bedside have lost that comfort. ICU physicians and nurses have worked to reach out to families and provide updates on patient progress and prognosis, whether by phone or video teleconference call, but much can be lost in translation. A rare visit to the hospital is often reserved for what is deemed true end-of-life care, when family input remains vital but is often met with what "could have been", had the family and loved ones been able to visit sooner, when perhaps goal-directed care might have been approached more cohesively. Patient and family satisfaction have suffered, and burnout amongst intensivists and nurses have increased significantly.

What can be done? With improvement in our understanding and care paradigms for COVID-19, we continue to work to make inroads in treatment, and coupled with amplified vaccination programs, recovery remains hopeful. Through this spectrum of gradual recovery, each institution will need to look at local epidemiology regarding the pandemic, determining a balance between value in family involvement at the bedside rather than remotely. Efforts to improve remote communication have been facilitated with video conferencing platforms, and need to be structured and scheduled to ensure consistency. Social workers have been of significant importance in helping clinicians navigate the myriad complexities of families and healthcare decision makers.

For patients designated for the operating room, more streamlined approaches to having the right stakeholders present for these discussions need to happen prior to the day of surgery. Preoperative anesthetic evaluation clinics, like the Preoperative

2021's Virtual Legislative Session was Successful

By Lauren Schmitt

Commonwealth Strategy Group

The 2021 Virginia General Assembly session officially came to an end on March 1. Despite the challenges of a virtual session and not being able to communicate face-to-face with legislators, it was still a very successful legislative session for us. We were able to defeat a number of bills that would've been harmful to the House of Medicine.

Our biggest victory this session was defeating SB 1107, carried by Senator Bill Stanley, that would have repealed the current cap on medical malpractice monetary rewards in Virginia.

In 2012, Virginia passed a law capping the medical malpractice monetary reward for 20 years. This was an agreement between the Medical Society of Virginia and the Virginia Trial Lawyers Association. SB 1107 would have removed that cap.

We were able to defeat this bill, but the legislators made it clear that they will try again next year and that they believe there are issues with the current system. It will be our top priority over the next year to educate legislators on why the cap is necessary and should not be changed.

We were able to once again defeat legislation that would have allowed naturopathic providers to be licensed in Virginia. Despite the bill failing last year and a recommendation from the Department of Health Professions not to require licensure, they still moved forward with legislation. We



were pleased to see these bills, SB 1218 (Petersen) and HB 2044 (Rasoul) defeated in committee.

We knew going into this session that we would see legislation to allow nurse practitioners to practice independently after only two years of clinical experience (current law is five years). Governor Northam issued an Executive Order at the beginning of the COVID-19 pandemic changing it to two years.

It was set to expire when the state of emergency ends. Delegate Dawn Adams introduced HB 1737, which would have permanently changed the law to match the Executive Order. We strongly advocated against this bill and were very vocal with our opposition.

As a result of the pushback from the physician community, the bill was amended to expire on July 1, 2022. This gives us another chance in the 2022 session to address this issue again.

We also supported legislation to expand telemedicine services. SB 1338 (Barker) and HB 1987 (Adams) clarify that health plans are permitted to reimburse providers for audio-only services (The Code currently states that audio-only is not considered telemedicine and that had led to some discrepancies in reimbursement).

While the session might be over, there is still a lot of work to be done. We will be reaching out to legislators over the spring and summer to discuss several issues we know will be coming up in 2022.

And get ready to start seeing campaign ads again... Virginia has statewide elections this November for Governor, Lieutenant Governor, Attorney General and the House of Delegates. We will keep you updated as election season gets closer!

Serious Discussions, from page 12

Assessment, Communication, and Education (PACE) Center at VCU, play an instrumental role in flagging patients with vital preoperative concerns. Their role may need to grow into incorporating more in-depth discussions regarding code status. The same can be said for surgical and primary care clinic visits, which already comprise a significant percentage of advance directive initiation.

Anesthesiologists' roles have been rightfully emphasized and lauded through our roles in the COVID-19 pandemic at multiple levels of care, and we are uniquely positioned throughout healthcare systems to help facilitate serious illness conversations in the perioperative world. We have risen to the challenges that we have faced this year - our position as perioperative stewards of care has never been more important.

References

 Healey A, Sherbino J, Fan J, Mensour M, Upadhye S, Wasi P. A low-fidelity simulation curriculum addresses needs identified by faculty and improves the comfort level of senior internal medicine resident physicians with inhospital resuscitation. *Crit Care Med* 2010;38:1899–903.

- 2. Statement on advance directives by patients: 'do not resuscitate' in the operating room. Bull Am Coll Surg 2014;99:42–3.
- 3. Sirianni G, Torabi S. Addressing serious illness conversations during COVID-19. *Canadian Family Physician*. 2020 Jul;66(7):533.
- 4. Hickey TR, Cooper Z, Urman RD, Hepner DL, Bader AM. An agenda for improving perioperative code status discussion. *A&A Practice*. 2016 Jun 15;6(12):411-5.

The Airway Alert: A Multi-Disciplinary Approach to Management of The Difficult Airway

By Maxine Lee, MD, MBA, FASA

VSA Past-president Partner, Anesthesiology Consultants of Virginia, Inc Anesthesiology Consultants of Virginia, Roanoke, VA



Carilion Roanoke Memorial Hospital is Carilion Clinic's flagship hospital. It is an 850-bed, tertiary referral center with a one million-patient catchment area and a Level I Trauma Center. As such, it gets

Dr. Maxine Lee

its fair share of bad airways - trauma, angioedema, morbid obesity, head and neck cancers, etc.

Airway management is performed by various specialties throughout the hospital. Intubations in the ED are performed by the EM physicians. Intubations in the in-patient setting, in addition to anesthesiologists, are performed by various services with variable levels of expertise in difficult airway management.

Prior to developing an Airway Alert protocol, there was no formal process in place to facilitate communication and care management between disciplines in these high risk and time sensitive situations. With this in mind, an Airway Alert process was developed in order to address the complexity of a patient in acute respiratory distress who could potentially require an emergent surgical airway.

The Airway Alert process, modeled after our Code Blue process, quickly brings personnel and resources to the patient with a difficult airway and facilitates safe and efficient care.

I was Vice President for Medical Affairs (VPMA) when I initiated the project. As a member of the ASA's Society for Airway Management, I became aware of other institutions that had established an Airway Alert or Code Airway process and realized that our patients would also benefit. Dr. Aaron Joffe from The University of Washington,



Seattle provided a wealth of information gained from his institution.

Development of an Airway Alert involves buy-in and collaboration across multiple specialties and our first step was to establish a multidisciplinary Airway Committee that met monthly for approximately 18 months.

As VPMA, I represented the hospital's administration; other participants represented Anesthesiology, Emergency Medicine, ENT, Critical Care Medicine, Trauma Surgery,

Difficult Airway from page 14

Nursing, Respiratory Therapy and thankfully, a Performance Improvement Process Engineer was also involved.

Involving all stakeholders was important so they can fully participate and have their concerns addressed and met. For example, the emergency medicine physicians raised concerns that the anesthesiologists would "swoop in" to manage these difficult airways and disallow participation by the EM residents.

In response, the anesthesiologists agreed to allow participation from the EM residents as much as was possible. Another concern focused on the disposition of the patient with a difficult airway who presented through the ED and was brought to the OR for airway management. Would critical care medicine be willing to admit these patients such that they need not return intubated to the ED or remain in the PACU?

The committee's work focused on developing criteria by which patients might be identified as an Airway Alert. Pathways of care for patients with difficult airways were discussed for patients presenting through the ED and for in-patients.

Pediatric intensivists were consulted in mapping out a process for pediatric patients. Our Performance Improvement Engineer mapped out multiple pathways for patient management before we decided on the pathways shown in the flowchart. It was also important to standardize airway equipment and to ensure there was enough equipment to stock carts that would be brought to the patient's bedside during an alert.

Another important aspect of the committee's work was education; ensuring that physicians, nurses, and respiratory therapists throughout the hospital became aware of the alert, and when to call an alert, instead of calling only the anesthesiologist as they would for a routine intubation.

When an Airway Alert is called, those paged to the patient's location are the anesthesiologist, trauma surgeon, nursing clinical administrator, respiratory clinical team leader, respiratory therapist, and the OR is notified in the event a room needs to be quickly set up for a surgical airway.

Everyone called converges at the patient's bedside to assess the patient's condition. The fundamental question for the physicians



These difficult airway emergencies are low volume, yet very high risk, and thus require near perfect management to achieve the most optimal outcomes. The Airway Alert Process provides for a multi-provider rapidresponse team for skilled airway management, which results in improved patient safety through collaboration present is whether the patient's airway can be safely managed at the bedside or better managed in the OR. If a surgical airway seems likely, will the trauma surgeon be in attendance or will the ENT surgeon be called in? ENT surgeons do not take in-house call and have a 30-minute response time. For pediatric patients, the pediatric anesthesiologist also takes call from home with a similar response time.

These difficult airway emergencies are low volume, yet very high risk, and thus require near perfect management to achieve the most optimal outcomes. The Airway Alert Process provides for a multi-provider rapid-response team for skilled airway management, which results in improved patient safety through collaboration.

Abstracts

Improving Breast Brachytherapy Perioperative Course with Erector Spinae Plane Blocks

By Yvonne Nguyen, MD; Jialiu Li, MD; Micheal Buxhoeveden, MD; and Sabrina Dhillon, MD Anesthesia Resident(s) Department of Anesthesiology, VCU Health System, Richmond, VA



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Introduction

Breast cancer is the leading cause of both cancer and cancer-related death in females in the United States [1]. Breast brachytherapy has emerged as an adjunct and monotherapy in this population.

Studies have found improved outcomes with adjuvant brachytherapy with decreased mortality and reduction in recurrence [2, 3]. With the growing implementation of breast brachytherapy, anesthetic management of these patients needs to be optimized. This patient population often requires multiple hospital visits for treatments and may have multiple comorbidities that increase the risk of perioperative complications.

Regional anesthesia is commonly used as the principal technique for brachytherapy gynecologic and urologic cases, but data is lacking on the efficacy of adjuvant use of regional anesthesia for breast

POSTOPERATIVE MORPHINE EQUIVALENT USE



Use of Erector Spinae Plane Block

Graph 1: Postoperative morphine equivalent use of control (N=11) vs. study group (N=3). Average postoperative equivalent use was significantly lower in study group (0) versus control group (1.82); p = 0.02, t stat = 2.36, t critical 1.81.

brachytherapy procedures [4].

This study aimed to evaluate the efficacy of erector spinae plane (ESP) blocks for perioperative pain management in respect to overall pain scores, opioid usage and length of stay in breast brachytherapy cases. We hypothesized that the use of ESP blocks would be associated with reduced postoperative pain scores, decrease opioid requirements and length of stay.

Materials and Methods

A retrospective pilot study was completed with patients that underwent breast brachytherapy interventions in an ambulatory setting. As per institutional guidelines, this study was reviewed by Virginia Commonwealth University (VCU) Health Medical Center IRB board, and is exempt from IRB review requirements as per Virginia Commonwealth University's (VCU) Office of Research and Innovation policy as the study is devoid of patient identifiable information and consists of a population not generalizable outside of VCU. From a group of 49 patients, we randomly selected 11 patients without perioperative ESP blocks as a control group and 3 patients with perioperative ESP blocks for a total of 14 participants. Patient demographic information was collected including age (years), body mass index (BMI) and American Society of Anesthesiology Class (ASA 1-4).

Upon arrival to the preoperative assess-

ment area, eligible patients were identified and after discussion with the patient and surgeon, ESP blocks were offered to appropriate patients. Patients in the ESP cohort received an ultrasound-guided erector spinae plane block either unilaterally or bilaterally depending on the laterality of the procedure. These patients received 0.25% ropivacaine as a single shot injection under continuous ultrasound guidance with sterile technique. Study participants proceeded under general anesthesia or monitored sedation depending on the anesthetic plan appropriate for each patient for their surgical procedure.

After the surgical procedure, patients were monitored in the Radiation Oncology recovery area, where pain scores were documented by nursing staff with verbal quantitative values (scale 0-10, 0 being no pain and 10 being the worst pain). Opioid use was documented intraoperatively in the anesthesia charting and postoperatively by nursing staff, and these values were converted to average morphine equivalents to evaluate pain control. Time from the patient's procedure to discharge were recorded. Unpaired t-test analyses were done to compare the control group versus the sample population to look for statistical significance in pain scores in the postoperative period, overall opioid use and length of stay after procedures.

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Results

Postoperative morphine equivalent consumption was significantly lower in the ESP group compared to the control group (mean of 0 vs. 1.82, respectively; p = 0.02; Graph 1). Average immediate postoperative pain score was significantly lower for the ESP group compared to the control group (mean of 1.67 vs. 4.64, respectively; p =0.025, Graph 2). Average pain score at time of discharge was lower for the ESP group compared to the control group but not statistically significant (mean of 1.67 vs. 2.73, respectively; p = 0.23). Lastly, length of stay was significantly lower in the ESP group compared to the control group (mean of 3.67 vs. 5.36, respectively, p=0.036, Graph 3).

Discussion

ESP blocks have been well documented in providing analgesia for rib fracture patients as well as larger breast reconstruction and mastectomy surgeries; however, there has been little to no data for its utilization in breast brachytherapy or in ambulatory care centers. Our literature review revealed that use of ESP blocks in elective, inpatient, breast cancer surgery could reduce postoperative opioid use by as much as 65% in the first 24 hours [5, 6]. Our study, while limited in number of subjects, showed a similar trend in reduction of postoperative opioid use after breast brachytherapy treatment. With the prevalence of breast brachytherapy as part of treatment of breast cancer, our data analysis shows promise for further expansion of this regional technique. Given that this is a novel approach to anesthesia management in breast brachytherapy, our study was limited with a small sample size as a pilot study. In the future, having a more robust study size with additional quality metrics would allow for a more complete characterization of this approach to anesthesia management in breast brachytherapy.

Conclusion

The use of erector spinae plane block in the setting of breast brachytherapy is a novel technique that can help significantly reduce opioid use in the postoperative setting as well as reduce the length of recovery in the post-anesthesia recovery unit. Anesthesia management and regional techniques for breast brachytherapy require further research as an increasing number of patients are enrolling in this treatment modality. Erector spinae plane blocks appear to be an effective means of pain management, but additional research is required to determine

IMMEDIATE POSTOPERATIVE PAIN SCORE



Graph 2: Immediate postoperative pain score of control (N=11) vs. study group (N=3). Average immediate postoperative pain score was significantly lower in study group (1.67 out of 10) versus control group (4.64 out of 10); p = 0.02, t stat = 2.58, t critical = 2.02.



LENGTH OF POSTOPERATIVE STAY

Graph 3: Length of postoperative stay of control (N=11) vs. study group (N=3). Average hours of postoperative stay was significantly lower in study group (3.67 hours) versus control group (5.36 hours); p = 0.03, t stat = 1.98, t critical = 1.78

if it becomes a staple technique for breast brachytherapy cases.

References

- "Cancer Today." Edited by GLOBOCAN Project, Global Cancer Observatory, International Association of Cancer Registries, World Health Organization, Mar. 2019, gco.iarc.fr/today/fact-sheets-cancers.
- 2. Early Breast Cancer Trialists' Collaborative Group (EBCTG), S Darby, P McGale, et al. Effect of radiotherapy after breast-conserving surgery on 10-year recurrence and 15-year breast cancer death: Meta-analysis of individual patient data on 10,801 women in 17 randomised trials. *Lancet*, 378 (2011), pp. 1707-1716
- Shah, Chirag, et al. "Modern Approaches for Breast Brachytherapy." Seminars in Radiation Oncology, vol. 30, no. 1, 2020, pp. 61–67., doi:10.1016/j.semra-

donc.2019.08.004.

- 4. Benrath, J, et al. "Anaesthesia for Brachytherapy—5½ Yr of Experience in 1622 Procedures." *British Journal of Anaesthesia*, vol. 96, no. 2, 2006, pp. 195–200., doi:10.1093/bja/aei301.
- Aksu, C. (2019). Analgesic Effect of Bi-Level Injection Erector Spinae Plane Block After Breast Surgery: A Randomized Controlled Trial. Ağrı - *The Journal* of *The Turkish Society of Algology*. doi: 10.14744/agri.2019.61687
- 6. Gürkan, Y., Aksu, C., Kuş, A., Yörükoğlu, U. H., & Kılıç, C. T. (2018). Ultrasound guided erector spinae plane block reduces postoperative opioid consumption following breast surgery: A randomized controlled study. *Journal of Clinical Anesthesia*, 50, 65–68. doi: 10.1016/j. jclinane.2018.06.033

Medical Simulation in Anesthesia Residency Training

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es that have occured in healthcare and in medical education in recent years, it appears healthcare providers have had difficulty

Introduction

Medical simulation has been demonstrated to be an effective method for education. (1,2) Since the creation of the first simulator in the 1960's, the technology has developed and allows for mastery of learning of skills to the simulation of simple to complex clinical scenarios on high fidelity simulators. More recently simulation is being considered for achieving the goal of turning hospitals and healthcare systems into high reliability organizations. Simulation allows this through not only educating staff, but using in

situ simulation to

improve processes.

Through chang-



with the development of critical thinking. In 2004, the American Association of Medical Colleges (AAMC) published a report stating "the recurring theme that has manifest in many reports published during the past decade on medical education, namely, is the lack of effectiveness in preparing graduates for practice." A few years later, a report from the Carnegie Foundation entitled "Toward a Vision for the Future of Medical Education" was also critical of the poor connections between formal knowldege and experiential learning. During this same time period, a debate has ensued in regards to the effects of the 80-hour work week. In a study of over 107,000 neurosurgical trauma patients Hoh et al concluded the resident duty hour restriction increased complications and had no improvement in mortality. (4)

There is no expectation that the 80-hour work week will change, especially now when patient safety and medical errors are major metrics by which hospitals are evaluated. Because of this, we will likely see dramatically fewer experiences for medical students or residents, compared to previous years. However, there is a plausible alternative. Medical simulation provides one tool for us to increase exposure to clinical cases without interfering with resident duty hour restrictions. Below we describe the curriculum we use in the training of our anesthesia residents to improve their critical thinking and management of patients.

Curriculum Overview

The Central Virginia Veterans Affairs Health Care System (CVHCS VA) is an affiliate site for the training of residents in anesthesiology from Virginia Commonwealth University (VCU) Health. The Department of Anesthesiology at VCU Health has fourteen residents in each of the categorical anesthesia years, post graduate year PGY-2 through PGY-4. Rotation blocks at the VA last for 4 weeks and each block consists of three PGY-2 residents, one PGY-3 resident. and one PGY-4 resident. PGY-2 residents complete three rotations at the VA in an academic year while the PGY-3 and PGY-4 residents complete one rotation a year, so each rotation block has three PGY-2 residents, one PGY-3, and one PGY-4.

The simulation curriculum meets several ACGME anesthesiology milestones, primarily Situational Awareness and Crisis Management (Patient Care [PC] 7), but also the Application and Interpretation of Monitors

Simulation, from page 18

(PC3), Intra-Operative Care (PC4), Airway Management (PC5), and Post-Operative Care (PC8). The simulation scenarios are set around perioperative emergencies that are relevant to anesthesiologists. We developed different cases that would be relevant to each level of anesthesia learner, whether it be a CA-1 or a CA-3.

Each simulation scenario is directly followed by a formal debriefing with the simulation faculty and all participating residents. Debriefing was at the discretion of each faculty member but the 'Debriefing with Good Judgement' model was encouraged. This allowed faculty to assess the ACGME resident milestones of 1) Reflective Practice and Commitment to Personal Growth (Practice Based Learning and Improvement), 2) Interprofessional and Team Communication (Interpersonal and Communication Skills), 3) Foundational Knowledge (Medical Knowledge) and 4), and Clinical Reasoning.

Our simulation center employs the Sim-Man 3G (Laerdal Medical) and utilizes the ASL 5000 Breathing Simulator (IngMar Medical) which connects directly with the anesthesia machine residents use in the OR. One to two faculty members help run the simulation and debriefing, a simulation operations specialist operated the SimMan, and two volunteers played simulated actors (nurse, surgeon, etc). The total time required for a scenario and debriefing takes approximately an hour per scenario.

Discussion

Through these simulation cases we exposed the residents to uncommonly encountered, but clinically relevant, perioperative cases and their complications. Our goal is that they obtain an understanding of pathophysiology disease mechanisms, diagnosis management, and improve their understanding of Crisis Resource Management (CRM) principles.

Our philosophy of simulation is to "Sim, Treat, Repeat". The most important aspect of simulation is to observe the evolution of the resident's thinking over the course of residency. High fidelity simualtion has been demonstrated to be the most effective tool available for improving skill acquisition. However, simulation is expensive Our philosophy of simulation is to "Sim, Treat, Repeat". The most important aspect of simulation is to observe the evolution of the resident's thinking over the course of residency. High fidelity simualtion has been demonstrated to be the most effective tool available for improving skill acquisition.

and resource intensive in human capital required to run the simulation and conduct the debriefings.

The curriculum has received high marks on feedback from the residents; more importantly, the faculty have observed improvement in resident confidence in diagnosing and managing perioperative complications. Since we are able to observe the residents longitudinally over their residency we are able to observe them put into practice what we have taught in the simulation lab. This also allows the faculty to observe any gaps in knowldege, skills, or critical thinking, and later make needed adjustments in the curriculum.

In the future, a combination of virtual patient simulation being adapted from the gaming industry, in addition to the high fidelity simulation we curently conduct, should provide a balance in cost and manpower and make the return on investment of simulation more evident. It is worth noting, knowing there is a critical thinking gap, we can not rely solely on simulation for resident training and assessment.

Bibliography:

 Beal, Matthew David MClinEd; Kinnear, John MMedEd; Anderson, Caroline Rachael MRes; Martin, Thomas David MRes; Wamboldt, Rachel MBBS; Hooper, Lee PhD The Effectiveness of Medical Simulation in Teaching Medical Students Critical Care Medicine, Simulation in Healthcare: *The Journal of the Society for Simulation in Healthcare*: April 2017 - Volume 12 - Issue 2 - p 104-116doi: 10.1097/SIH.00000000000189

- Gollehon NS, Stansfield RB, Gruppen LD, Colletti L, Haftel H, Woolliscroft JO, Lypson ML. Assessing Residents' Competency at Baseline: How Much Does the Medical School Matter? *J Grad Med Educ*. 2017 Oct;9(5):616-621. doi: 10.4300/JGME-D-17-00024.1. PMID: 29075383; PMCID: PMC5646921.
- Gordon JA, Wilkerson WM, Shaffer DW, Armstrong EG. "Practicing" medicine without risk: students' and educators' responses to high-fidelity patient simulation. *Acad Med.* 2001 May;76(5):469-72. doi: 10.1097/00001888-200105000-00019. PMID: 11346525.
- 4. Hoh BL, Neal DW, Kleinhenz DT, Hoh DJ, Mocco J, Barker FG 2nd. Higher complications and no improvement in mortality in the ACGME resident duty-hour restriction era: an analysis of more than 107,000 neurosurgical trauma patients in the Nationwide Inpatient Sample database. *Neurosurgery*. 2012 Jun;70(6):1369-81; discussion 1381-2. doi: 10.1227/NEU.0b013e3182486a75. PMID: 22227483
- Issenberg SB, McGaghie WC, Petrusa ER, Lee Gordon D, Scalese RJ. Features and uses of high-fidelity medical simulations that lead to effective learning: a BEME systematic review. *Med Teach.* 2005 Jan;27(1):10-28. doi: 10.1080/01421590500046924. PMID: 16147767.
- 6. Park, Mee & Conway, Jane & Mcmillan, Margaret. (2016). Enhancing critical thinking through simulation. *Journal* of Problem-Based Learning. 3. 31-40. 10.24313/jpbl.2016.3.1.31.
- Skochelak, Susan E. MD, MPH A Decade of Reports Calling for Change in Medical Education: What Do They Say?, *Academic Medicine*: September 2010 - Volume 85 - Issue 9 - p S26-S33doi: 10.1097/ ACM.0b013e3181f1323f

Meet Your Legislator

Delegate Schuyler VanValkenburg

72nd District • History and Civics Teacher at Glen Allen High School

This last year has posed unusual and enormous challenges to education policy here in Virginia, as the readers of this journal are undoubtedly and sadly very aware. School nurses and health care practitioners have been heroes in both the school-specific problems we face and, in their willingness to step up to be part of the broader vaccination effort.

As a teacher, parent, and Virginian, I can't thank you enough for all of the work you do every day. However, the negative impacts of school closures, virtual learning, and public health disasters associated with COVID-19 are expanding and becoming more apparent by the day, for both children and communities at large. As a public school teacher, father, and state legislator, I have seen these impacts personally and at a community-wide level.

I will continue to work with my colleagues in the General Assembly to move us forward and respond to the adverse effects of COVID-19, especially in the impact of this virus on our schools.

For students, the past year has created diverse and profound problems. Mental health problems, learning loss, and stagnant social development are among the severe consequences students have suffered, through no fault of their own, during pandemic school closures.

I am leading the charge to craft a state law that ensures a responsible return to in-person learning for the 2021-22 school year so that we can begin to address our student's problems and needs. My plan will ensure that there are public health guardrails for school opening standards, that parents can opt into virtual instruction if they need to, and there are extensive health protections for our teachers, staff, and students.

My bill provided a longer-term and precise framework for school divisions, extending the proposal Governor Northam presented in February, requiring all schools to begin offering in-person learning options by March 15, in a way appropriate to their local needs.

COVID-19 has made it clear that now



As a teacher, parent, and Virginian, I can't thank you enough for all of the work you do every day. However, the negative impacts of school closures, virtual learning, and public health disasters associated with COVID-19 are expanding and becoming more apparent by the day, for both children and communities at large.

is more important than ever to restore and increase funding to our schools. Since the first week I ran for Delegate back in 2017, this issue has been a top priority of mine, and an issue the Democratic majority has continually emphasized since 2019. It's a tough road - only in 2020 did the level of school funding return to what it was before the Great Recession in 2009, and that leaves a decade of underfunding to make up.

In this year's budget, we have begun re-

allocating funding to dig us out of the hole a decade of underinvestment created, and alleviate the pandemic's difficulties for both students and school systems. This budget invests \$492.5 million to ensure schools remain at the funding levels they were before COVID-19.

The budget also includes a 5% pay raise for teachers, provides \$123 million to assist with COVID-19 health measures and student support programs, \$26.6 million for counselors, and \$30 million in grants for innovative learning loss remediation programs to help ensure we overcome learning loss and provide the mental health supports students need.

However, not every problem in Virginia's education system results from COVID-19. Several reports have long recommended revision of the Comprehensive Services Act for at-risk youth, and Virginia's special education system for high-needs learners has languished for more than a decade without new aid or attention.

In this General Assembly session, we are working to give both of these important areas more attention and bring best practices and new information to bear. Virginia's reliance on high-stakes SOL testing is also in dire need of reform. The Democratic majority, in a bipartisan coalition, is working to build a path away from the inflexible endof-year testing by using growth models that focus on developing a child's academic skills instead. Even curricular reform, long-needed and long-neglected, is getting attention, so that our course of studies ensures that all Virginians' histories are told to our children and present in our schools.

The General Assembly is meeting the pandemic's challenges, and I'm proud to be a part of that process. More than that, though, we are still charting a path forward to better and more equitable funding, modernization, and reform above and beyond the pandemic's impacts. If we can continue what we've begun in these last two years, the future is bright for Virginia students, teachers, and school staff alike.

Opinion

Some Thoughts on the Education of Patients

By Lynda T. Wells, MBBS, FRCA

Associate Professor of Anesthesiology University of Virginia, Charlottesville, VA



In medical school, I learned never to assume that the patient knew anything about human biology. To illustrate this, we were shown the results of a sociology project conducted on a random sample of

Dr. Lynda T. Wells

the general, adult population. They had been asked to shade in where the kidneys were on an outline of the human form.

The variation in the responses was huge, including about 10% of respondents who drew kidneys in the scrotum. The professor leading the class asked "What do you think it would mean to a woman who believed kidneys were in the scrotum to be told she had renal disease?" At the very least, it would be confusing.

Rebecca Skloot's book, "The Immortal Life of Henrietta Lack", is recommended reading for ethics classes. I believe all clinicians should read it, even apart from the ethical questions posed, just to read how Henrietta Lack's daughter, Deborah, understands her diseases (diabetes and hypertension) and medications.

After reading this, I wondered if an educated person could ever take their explanations down to a simple enough level. My idea of basic was so far above her understanding. It challenged me to think about how I would educate her if she were my patient.

These, and other examples, repeatedly come to mind as I explain procedures, answer questions and obtain "informed" consent. I often have the sense that the patient does not understand a word I say.

This does not seem to bother them. What they understand and appreciate is the time So how can we educate patients? Knowledge is to behavior as spaghetti is to a brick. That saying is one of my favorites and reminds me that knowledge alone does not change behavior. There has to be an emotional, personal link too

and effort expended in trying to communicate with them. This is paramount and appears to matter more than the successful transfer of information. That you tried means that you care. Caring matters. If you care, you'll do a good job.

Recently, a larger and more disturbing barrier to patient education than the "ignorance – education" divide has become apparent: the "fantasy – reality" gap.

The extent of this gap became clear to me in a conversation I had with the parents of a critically ill child in 2019. During the discussion of anesthetic risks, I mentioned that even if the anesthetic went perfectly the child might still die because she was so sick she might not be able to survive. The parents very matter-of-factly replied that it would be OK if she died because I could bring her back to life.

I explained that I would do everything in my power to resuscitate her and keep her alive, but that if she died I would not be able to restore her life. The parents were confused and asked many questions. Finally, I said "Death is permanent. At UVA, if you die in season one, you do not come back to life in season two".

I could not believe what I had said, but the parents were not offended and found

that explanation very helpful. I was stunned. It was the first time I had experienced this failure to comprehend reality. Now that over 500,000 people in the United States, and millions worldwide, have died of the corona virus "hoax", the "fantasy-reality" gap is more commonplace.

So how can we educate patients? Knowledge is to behavior as spaghetti is to a brick. That saying is one of my favorites and reminds me that knowledge alone does not change behavior. There has to be an emotional, personal link too.

Explanations must have personal relevance in some way in order to be heard. What makes them personal is frequently undefined. It just happens...or not. However, seeking a link will increase one's chances of being heard. Universal links include love, acceptance, status, power, respect, money, security, longevity, relief of suffering, and autonomy.

Starting "too basic" is a good idea. Reality checking also helps to frame ones approach. Literacy and reading comprehension are not universal. The majority of people gather information by audiovisual means via the internet. Handing a patient a sheaf of printed pages is unlikely to be as effective as explaining the information face-to-face or providing a video demonstration.

In the future, I believe that focused video messaging with regard to what to expect in hospital, in the OR, with regard to surgery and anesthesia, how to take medications, etc., will be primarily communicated in visual form. Possibly displayed as video loops on screens throughout the hospital or clinic. Successful education can only occur when the media used are understood by the patient.

Patient education is not as straight forward as we are led to believe in medical school. Imparting information is not effective without a link to individual values.

Listening to gauge the starting point may offer the best chance of success...and frequent REALITY CHECKS!

Annual VSA Meeting Recap

By Casey Dowling, DO, FASA

VSA Treasurer Medical Director S.T.A.R.T. Clinic Winchester Anesthesiologists, Inc., Winchester, VA



2021 the Virginia Society of Anesthesiologists had its Annual Membership Meeting. Unlike previous years, but very much like all meetings held during the previous year, our meeting was held virtually. I am happy to re-

On February 2,

was r

port that almost 70 members tuned in!

Dr. Jeff Green addressed the group and reviewed the activities of his 2-year term. I personally think he should be commended for many things, but there two things I especially want to highlight: 1) His strong leadership during the strangest year in anesthesia, (bar none!) and for, 2) being the first VSA president to visit Winchester.

Michael Champeau, 1st Vice President of the ASA, joined us live for an update on ASA

Members in the News

affairs. He complimented us on our advocacy efforts, including our recent work with surprise medical billing. The ASA Strategic Pillars, member recruitment and retainment, scope of practice, and of course the "33% problem" (with reimbursement) were some of the other highlights of his report.

I am going to go out of sequence now to discuss the Treasurer's report: Dr. Craig Stopa informed us that our society is fortunate to be healthy financially. The reason I jumped the order of presenters is because it is this financial health that allows us to have the two vendors without whom the VSA could not survive or thrive.

The Ruggles Service Corporation, specifically Stewart Hinkley, Greg Leasure, Angela Puryear and our beloved Andrew Mann, keep our office infrastructure, communications, professional image, and finances intact. And then there is our lobbyist firm Commonwealth Strategy, in particular Lauren Schmitt. Her tireless surveillance, networking, and persuasion are integral to all that the VSA achieves in legislation.

Which brings us to the Legislative Report. The aforementioned Lauren Schmitt gave us detailed information about this session's bills that the VSA is supporting, opposing, and monitoring. Her efforts with scope of practice and reimbursement are a constant.

Next up was a blessedly short, but particularly inspiring, report on membership. Alright, yes, that was my report.

Janet Ha, CAA, who serves as Treasurer to the Virginia Academy of Anesthesiologist Assistants (VAAA), was invited to speak to us about the current state of Anesthesiologists Assistants. Though they have a way to go, the fight continues towards licensure for them to practice in the Commonwealth of Virginia.

The big action item of our yearly meeting is the election of our next slate of officers. This went off without a hitch, and I thank all who voted for me as your Treasurer.

Our meeting was then ended with closing remarks by our incoming President Dr. Marie Sankaran-Raval. I am looking forward to the work we will do under her leadership.

Truth be told, I greatly missed networking with my fellow anesthesiologists from all over the state of Virginia. But in these COVID times, we do the best we can. Thank you to all 60(+) of you who attended the VSA meeting on February 2, 2021.

I look forward to seeing you all, if not at the ASA in San Diego, at our meeting next year in Richmond.

Anesthesiologist Dr. Michelle Lynam Wins Dr. USA Pageant

VSA Member, Michelle Lynam, MD, of Commonwealth Anesthesia Associates in Richmond, won the title of Dr. United States of America for 2021.

Dr. Lynam had never entered a pageant before but was inspired by the message of this pageant: "Smart is Beautiful". The organization focuses on education, mentoring and community service.

Her platform is mental health awareness, Covid education, and encouraging youth to go into STEM fields.

Dr. United States of America is a competition for individuals (46 years+) with an earned and accredited doctorate in any field, terminal or non-terminal.

The pageant is run by Dr. World Productions, which also runs Dr. World, Dr. America and and Ms. World Achievement pageants.





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