The Advantages of Ambulatory Extended Recovery Facilities
Save the Date

PGA 77
PostGraduate Assembly in Anesthesiology

Fri. - Mon. Dec. 8-11, 2023 Marriott Marquis
New York City

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President's Message

Strengthening Our Advocacy Efforts

JASON LOK, M.D., FASA

Looking back on the latest legislative session in New York, we were once again successful in preserving physician-led anesthesia care. I am grateful for the lobbying efforts of the nearly 50 volunteers who traveled to Albany on Legislative Day to make their voices heard. We participated in 76 meetings with our local legislators and their staff members. The nurse anesthetists were also present in Albany that day, lobbying against our safe anesthesia bill. Despite their larger turnout, we prevailed thanks to the leadership of Government and Legal Affairs Committee Chair Dr. Jonathan S. Gal and Vice Chair Dr. Ansara Vaz; our Albany lobbying firm, Reid, McNally and Savage; and Chuck Assini, Esq., our legislative counsel.

Unfortunately, this fight will likely resurface next year. I encourage all NYSSA members to consider visiting our state legislators locally rather than waiting for Legislative Day in Albany. We should forge our connections at least twice a year rather than just during this one day. This would allow those who are unable to make it to Albany to participate in the legislative process. Advocacy can also be accomplished by funding our NYAPAC and, better yet, encouraging a colleague to join the NYSSA. We must strengthen our contributions to our advocacy efforts so that we can build a war chest for any unforeseeable events.

In October, 24 NYSSA delegates will attend the annual ASA meeting in San Francisco. We are allotted one delegate for every 100 active members of the ASA. We would have a larger delegation if more of the approximately 5,300 licensed anesthesiologists in New York became members of the NYSSA. We might even surpass the number of delegates from California and Texas, which have 31 and 30, respectively. If you are attending the ASA annual meeting, I formally invite you to visit our NYSSA hospitality suite at the San Francisco Marriott Marquis. For more information, contact HQ@nyssa-pga.org.

The next important meeting will be our own PostGraduate Assembly in Anesthesiology (PGA) December 8-11, 2023. Under the leadership of Dr. Linda Shore-Lesserson, her team will be preparing PGA77 to be
another successful event. There will again be an opportunity to take advantage of the education-on-demand component of the PGA, which will provide access to select sessions from the conference. Our members were able to earn up to 11.5 AMA PRA Category 1 Credits™ from PGA76. This provides an added benefit of membership, especially for those who are unable to attend the PGA in person.

Finally, I would like to convey my sincere condolences to the family and colleagues of Dr. Rebecca Twersky, a longtime faculty member in the Department of Anesthesiology at SUNY Downstate. Dr. Twersky was recognized in the summer issue of Sphere. On a happier note, we should congratulate Dr. Vilma Joseph for being elected president-elect of the Bronx County Medical Society and alternate delegate to the AMA for MSSNY. Congratulations are also in order for Dr. Stacey Watt, who was elected president-elect of the Erie County Medical Society. On the ASA front, Dr. Tracey Straker will be running for the position of vice speaker. Let’s help her win this election by giving her the full support of the NYSSA membership.

Again, I am honored to serve as your 2023 president, and I look forward to addressing any issues that come before our organization through the remainder of the year.

Thank you
Healthcare staffing, worsened to crisis levels by the pandemic, continues to deteriorate, affecting emergency departments, urgent care centers, clinics and hospitals alike. Healthcare systems have been forced to hire more expensive temporary healthcare workers in response to the deficit of long-term workers who left their jobs during the “Great Resignation.” This mass exodus was partially due to the significant job stressors related to the pandemic that resulted in disillusionment and burnout for so many healthcare professionals. Ironically, the presence of such a high number of temporary healthcare workers, who are often paid significantly more than their long-term counterparts, adds to feelings of stress and burnout for long-term workers. As the individuals with the institutional knowledge and experience, these workers are being forced to orient and train temporary staff while being paid less. This new paradigm will continue to make it difficult to recruit and retain valuable long-term employees, with many more leaving the profession due to low morale and the unshakeable feeling that they are undervalued.

The staffing crisis is also resulting in delayed patient care, with emergency rooms and clinics overwhelmed with patients, as well as delays in emergency and elective surgeries. Surgical care that proceeds within hospitals is especially costly. The move to shift surgical care into ambulatory surgery centers (ASCs) is largely a result of this cost analysis and a desire to improve efficiency. This shift may help alleviate the delays in surgical care that have resulted from the staffing crisis, as staffing within ASCs has been more stable due to a favorable working environment and better hours, especially for nurses. For the foreseeable future, the focus for hospital executives will likely be on managing their hospitals out of this crisis and will include trends already being seen: the growth and development of more ambulatory surgery centers and the development of new extended stay center (ESC) facilities off-site from main hospitals, where provisions for 23-hour overnight care are included. When compared to an inpatient...
stay, ESCs lower costs for patients who may require additional oversight and supervision following a standard medical procedure. ESCs may build on the success of ASCs, as ASCs have been shown to operate more efficiently and can handle larger volumes of patients while often providing higher quality, value-added healthcare in an approach that prioritizes patient-centered care.

The feature article in this issue of Sphere explores this topic and considers a thoughtful approach to expanding surgical care off-site from main hospitals, with more complex surgeries for a more diverse population of patients. Despite the current challenges healthcare systems face, decisions made by organizations now to expand care delivery in value-added ways may indeed improve the quality of care for patients.
Examining the Advantages of an Ambulatory Extended Recovery Facility

KARA M. BARNETT, M.D., FASA, SONIA G. PYNE, M.D., M.S., FASA, AND BOBBIEJEAN SWEITZER, M.D., FASA

Introduction

Ambulatory extended recovery facilities, which have evolved from ambulatory outpatient surgery programs, provide a unique set of benefits for many patients. Rather than limiting recoveries to just hours with a same day discharge, these facilities allow carefully selected complex procedures and patients to recover outside of the hospital for a one-night stay.\(^1\)\(^2\) In general, ambulatory extended recovery programs are possible due to improvements in both surgical techniques (e.g., minimally invasive procedures) and perioperative care (e.g., enhanced recovery plans).\(^2\)\(^3\) Patients whose procedures are not entirely “outpatient” are moved from the hospital setting, freeing up space in the operating room as well as inpatient beds while resulting in low hospital transfer and readmission rates and high patient satisfaction.\(^2\)\(^4\)\(^5\)

Table: Advantages of Ambulatory Surgery Centers and Extended Recovery Facilities

<table>
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<tr>
<th>Ambulatory Surgery Center</th>
<th>Extended Recovery Facility</th>
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<td>Lower staffing</td>
<td>Expanded number of procedures</td>
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<td>Fewer required resources</td>
<td>Increased procedure complexity</td>
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<td>Increased patient complexity</td>
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Procedures

Ideally, procedures selected for an ambulatory extended stay facility may be more complex than those done in an ambulatory surgery center yet are safe and require no more than a one-night stay. All the factors that influence recovery should be considered, including safety, pain control, postoperative nausea and vomiting (PONV), ability to resume oral intake, early ambulation, and facility resources and services.\(^6\)

With the expansion of minimally invasive procedures, consideration should be given to the types of cases that can be performed at an ambulatory extended recovery facility.\(^2\)\(^4\) These may include robotic or laparoscopic prostatectomies and total or partial nephrectomies and hysterectomies, as well as video-assisted thoracoscopic lobectomies.
Cases with a low risk of bleeding and conversion to an open procedure can be done successfully at an ambulatory extended recovery facility. Distance from a receiving hospital should be considered when selecting procedures. High-risk cases should be performed in a hospital setting rather than in an ambulatory extended recovery facility when the transfer hospital is far away.

Standardized perioperative pathways with regional techniques can improve postoperative pain control, minimize opioid usage, and speed patient recovery. Regional techniques may be considered for cases such as mastectomies with immediate tissue expanders and hip or knee arthroplasties. In addition to nerve blocks, these perioperative pathways should have a holistic approach, with protocols to minimize PONV and postdischarge nausea and vomiting and to reduce postoperative recovery time.

Head and neck surgeries can also be performed at ambulatory extended recovery facilities. Cases to consider include hemiglossectomies, parotidectomies, modified radical neck dissections, and partial or total thyroidectomies. In addition, it may be beneficial to have head and neck surgeons available in these facilities to assist with unanticipated difficult airways for any surgical case.
Patients

Preoperative patient planning includes optimization of comorbidities, patient education and preparation. Patients with uncontrolled diabetes mellitus and undiagnosed obstructive sleep apnea ideally should undergo intervention and optimization prior to surgery.

With the ability to keep outpatients overnight, ambulatory extended stay facilities may consider even more liberalized patient selection criteria than those acceptable at ambulatory outpatient surgery centers. The criteria can be used to identify patients who require preoperative optimization. Patient selection is a multifactorial process, considering comorbidities, anesthetic needs, facility type, and available resources. In a comprehensive review by Rajan et al., several comorbidities to guide patient selection for ambulatory surgery were discussed. These may include patients with difficult airways, ASA IV status, advanced age, frailty, a high body mass index, social issues such as lack of home support (e.g., incarcerated or unhoused), end-stage renal disease on dialysis, and morbid obesity. In general, optimized and stable comorbidities should not prevent surgery in an extended recovery facility unless the team anticipates the need for more than a one-night hospital stay.

Patient and caretaker buy-in is an important part of perioperative care and recovery success. Patient preoperative preparation includes education on the perioperative process, which may include regional techniques and postoperative recovery. Discussing recovery expectations, such as timely resumption of oral intake and patient ambulation, is a key component of patient education.
Recovery

Patients scheduled at an ambulatory extended stay facility may meet recovery milestones and be discharged without the need for an overnight stay. Alternatively, patients scheduled for same day discharge may need to stay overnight when discharge criteria are not met. Tokita et al. showed that the transfer rate to the hospital was 1.7% at their ambulatory extended stay facility. Reasons for transfer included the need for an elevated level of care (e.g., critical care), bleeding, reoperation after hours, or a need for a longer recovery than one night.

Patient recovery protocols should be aggressive in promoting oral intake and patient ambulation. Standardized pathways with orders for appropriate physical therapy, laboratory testing, and postoperative pain and nausea/vomiting medications should be included. Care should not be compromised because the case is performed at an ambulatory extended stay facility. Patients should receive the same ancillary care at the facility as they would at a hospital. To keep patients on track for a timely discharge, nursing staff should be trained to flag patients and alert physicians when patients are not meeting milestones.

An important element in ambulatory extended stay programs is utilization of quality metrics for outcome measurements. A study by Simon et al. found that postoperative electronic surveys for 10 days with nursing follow-up for triggered alerts were associated with a reduced number of urgent care visits after surgery at their facility. Electronic dashboards to measure outcomes such as case cancellations, hospital transfers, reoperations, and urgent care and emergency department visits monitor the success or failure of the ambulatory extended recovery program. When considering a method to measure the length of stay, Assel et al. advocated using the discharge time rather than the actual length of stay since a majority of their ambulatory extended recovery patients were discharged between 10 a.m. and noon. The data from these quality metrics can be used to make changes to the perioperative surgical pathways.

Expanded Resource Considerations

Because of the increase in surgical and patient complexity, ambulatory extended stay facilities should provide increased resources and staffing compared to a typical ambulatory surgery center. In turn, these can influence what patients and procedures are selected for the facility. Running an ambulatory extended stay facility is more than just having
beds for overnight stays. These facilities must have in place multidisciplinary teams, including physical and occupational therapy and social services. Appropriate facility resources and staffing are needed, with a priority on patient safety, no matter the time of day.

Emergency preparedness is essential for an ambulatory extended stay facility, especially if located far from the transfer hospital. Emergency checklists, a transfer policy, and contracts with an ambulance company are important components of preparedness and should be practiced during mock simulations. Staff education and training are vital to understanding facility policies and procedures as well as patient safety. If more complex procedures are performed, the availability of emergency blood, whether through a full-service blood bank or a locked refrigerator, is crucial.

Other resource considerations for an ambulatory extended stay facility include access to laboratory testing, whether point-of-care or standard, and pathology services for on-site specimen processing and evaluation. A dependable sterile processing department will need to not only acquire and process appropriate equipment but also to ensure that appropriate implants in various sizes are available.

**Figure 2: Ambulatory Extended Stay Program Elements**

![Figure 2: Ambulatory Extended Stay Program Elements]

**Conclusion**

Ambulatory surgery is continuing to evolve. With ambulatory extended recovery programs, patients are moved out of the hospital to a hybrid facility that can provide care for more complex procedures and patients. A multidisciplinary team and all stakeholders should work together to design a program and facility that promotes safety with timely patient
recoveries. Anesthesiologists should lead the development of and serve as gatekeepers for these facilities.

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REFERENCES


The PGA’s International Scholars Program turns 30 in 2023.

Through this program, we have enhanced the education and training of more than 400 scholars from 60+ countries, all thanks to the generosity of the NYSSA and its members.

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Euroanaesthesia 2024 is a prestigious annual congress in anaesthesiology and intensive care, uniting experts from over 100 countries.

With a diverse scientific program, including abstract presentations, educational sessions, and lectures by renowned specialists, the event offers an engaging platform for knowledge sharing. Covering a wide range of topics, from general anaesthesiology to intensive care and pain medicine, the congress explores science in relation to patients, organs, and therapies. Various session formats promote interaction, while workshops provide learning opportunities and foster innovation.
A Frail Old Man

LINDA M. LEE, M.D.

Knock Knock. I gently knock on the door, carefully walking in. From behind, he is a frail figure, his green hospital gown swallowing his being. He can’t quite swing his head fully around to look at me, so I move closer to the bed to be in his vision. He’s in the middle of eating his breakfast, some eggs and a fresh pastry his wife brought him yesterday. He doesn’t have many teeth left, so he can’t eat much. I bring him his walker, and together we walk down the hallway. I swipe my ID badge and with a “click” the doors to the inpatient psychiatry unit unlock. He follows me to the conference room around the corner. The conversation dissipates once the doors swing open, all attention on the star of the show, our patient. We go over how he’s doing and how he’s been sleeping.

“Any thoughts of hurting yourself?” This frail old man looks down for a moment and says, “No, everything is good.” This frail old man who, because of his cataracts, can barely see us, his loved ones, or his beloved weather channel. This frail old man who can barely go down the stairs in the morning. This frail old man who rarely speaks with his children anymore for fear of overstepping into their independent lives. This frail old man who feels like a burden. This frail old man who tried to end his life.

The more I learn about him, the more I understand how much he has lost. As his eyes lose sight, his legs grow weaker, and his energy dwindles, his every day is a ghost of his past life. What does he have to live for?

Over the next few days, his wife comes in every day with food he likes and the pastries he craves. His children have family meetings with him and us, his care team, to understand how he can be inspired to live. When it’s time for him to go, he shuffles down the hallway, no longer in the green hospital gown but overwhelmingly swallowed just the same by the clothes that hang on his tiny frame. He is inspired for now by the support of his family.

A couple weeks later, I am on the consult psychiatry service. We’ve been consulted to see a patient on the general surgery service because of the patient’s recent admission to the inpatient psychiatry unit.
It’s him. When I walk into the room, I am struck by how he swings his head to look at me the same way he always did when he was in the inpatient unit — not quite able to turn all the way around but understanding it is me just the same. He looks tired, defeated, in pain. Back in that green hospital gown. He has been taking his SSRI and his children visit him more. His son helps him walk to his favorite café down the street to get coffee in the morning, just like he used to. But he’s here with yet another setback, another hospital stay.

He is getting surgery on the day that I go see him, and the anesthesiologist walks in while I am speaking with him. I stay, at the patient’s request. I remember worrying about how this new provider was going to describe to the patient his OR and anesthetic plan. I was worried there was no way this provider knew how delicate and vulnerable the patient was. That he had tried to end his life a mere two weeks ago. That how the patient is treated during his surgery and how he handles the process could play a huge role in the progress he has made.

But it turned out I didn’t need to worry. The anesthesiologist came in and spoke to the patient with patience, gentleness, and knowledge. He spoke with him in the reassuring manner that comes from advocating for and taking care of countless patients with many different fears about surgery and anesthesia. He anticipated questions and knew how to word things to make the patient feel like he knew what was going to happen, that he would have someone by his side the whole time, and that it was normal to be scared.

That was the last time I saw that patient. It was the last day of my psychiatry rotation as a third-year medical student. But what has always stayed with me is the impact that anesthesiologist had. He had no idea what kind of story he was walking into, yet he was able to provide the support and reassurance that patient so badly needed.

As an anesthesiologist-in-training, I will always carry that with me. I will never know the full context in which I am meeting someone in their medical journey, as that is just the nature of the specialty. And more likely than not, I will only be with that patient for at most a day, and never see them again. But I can never underestimate the impact my interactions will have on them. I will always try my best to
understand where patients come from, make patients feel safe, and be their strongest advocate as they go through their surgery day, no matter what. Because that is what anesthesiologists do.

Linda M. Lee, M.D., is an anesthesiology resident at Tufts Medical Center. This piece was originally published in Anesthesiology, and Dr. Lee welcomes this opportunity to share it with members of the NYSSA.

The NYSSA Ad Hoc Committee on Environmental Sustainability in Anesthesia Presents: Sustainability Tip of the Quarter

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Euroanaesthesia 2023

Drs. Linda Shore-Lesserson and Rose Berkun

Drs. Chirstopher Campese, Mark Nunnally, Linda Shore-Lesserson and Jason Lok with Stuart Hayman

Stuart Hayman, Laura Hayman, Paul Pomerantz, Nancy Beaumont, Dr. Patricia Soong, Dr. Michael Champeau, Kathy Harter, Dr. Ronald Harter, Dr. Randall Clark and Dr. Joy Hawkins
Achieving Fulfillment in Family and Professional Life as an Anesthesiologist Mom

LAUREN LISANN-GOLDMAN, M.D., ELVERA L. BARON, M.D., PH.D., FASA, BARBARA S. ORLANDO, M.D., PH.D., FASA, AND POONAM PAI, B.H., M.D., M.S.

Facing demands from family, friends, and patients, and without enough hours in a day, having children as a full-time physician anesthesiologist seems impossible. Can we really “have it all”? Can we juggle our professional and personal lives without dropping a ball somewhere? In the words of American writer and activist Betty Friedan, we argue that we “can have it all, just not all at the same time.”

From medical school to residency to fellowship and perhaps additional degrees in between, we have trained ourselves to believe that achieving less than perfection is a failure. A failure at what? Being a top doctor? A model parent? For some, this fear of “failure” begets delaying parenthood in favor of professional goals; for others it means neglecting professional goals in favor of starting a family. It is not a coincidence that most of our personal friends who are married with children are non-physicians; our physician friends are single, engaged, or newly married. Though challenges to starting families exist for anesthesiologists of all genders, it is hard to deny the additional obstacles faced by women. One of our grandmothers used to joke to her friends, “Your grandchildren have kids while mine have degrees!”

Friends and relatives never fail to remind us that our biological clocks have been ticking while we have been passing time chasing professional accolades. Unfortunately, they’re not wrong: Women in medicine have children later in life and have higher infertility rates than the general population (Stentz 2016), which is disconcerting for residents and young attending physicians who are finally considering starting a family. If a doctor mom is fortunate enough to surmount the hurdle of fertility at advanced maternal age, she is then faced with occupational stressors: exposure to radiation and volatile anesthetics, back pain (made worse by double lead aprons), difficult-to-schedule obstetric appointments, and finding time and means to breastfeed or pump.
Despite the challenges associated with pregnancy and childbirth, the number of women anesthesiologists increased from 2006 to 2016. However, a smaller percentage of female anesthesiologists than male anesthesiologists are full professors (7.4% versus 17.3%), based on a recent analysis by Bissing and colleagues of data from the Association of American Medical Colleges. Furthermore, the percentage of anesthesiology department chairs who are women has remained at just over one-tenth of chairs from 2006 to 2016 (12.7% versus 14.0%, P = .75) (Bissing 2019). Similarly, D’Souza et al. recently reported that out of 87 chronic pain fellowship programs, 17 were led by females and 70 by males, though equal proportions had attained senior academic rank status (D’Souza 2022). Although child rearing is but one factor contributing to this discrepancy, it is hard to deny that parenthood at least plays a role. How many part-time anesthesiologist parents can you personally name? How many of those are women with kids? How many of them have departmental leadership roles?

Viewing these trends from the perspective of the field of sociology, a 2007 study explored the repercussions of cultural assumptions surrounding motherhood. Correll et al. suggest that motherhood is a “status characteristic,” where qualities and expectations are attached to individuals by virtue of a stereotypical identity, which results in predictable behavioral interactions. The authors hypothesized that mothers would be perceived as less competent in the workplace, which would have consequences for their careers. The study focused on the tension that exists between the status characteristic of motherhood, including the idea that a good mother limitlessly devotes time and energy to her children, and the perception of an “ideal worker,” who is fully committed to and present for long hours at work. On the other hand, the understanding of what it means to be a good father, they describe, is not at odds with what it means to be a good worker. A simulated job application experiment held workplace performance constant and compared fictitious equally qualified male and female candidates who differed only in parental status. As hypothesized, mothers were evaluated unfavorably compared to women without children in terms of their competence and commitment, resulting in inferior hiring, salary and promotion.
decisions. In contrast, males were not penalized for being fathers. Females with children were perceived as less competent than males with children, and males with children sometimes actually benefited professionally from being a parent (Correll 2007).

Though it is impossible to discern correlation and causation from something as multifaceted as the interaction between growing a family and growing a career, we can at least start by making a difference in our own lives and those of our colleagues. We can be attentive to the experiences that our colleagues are having and offer advice, support, or an open ear. We can recognize that sometimes the most rewarding aspects of life are the most challenging, and that we don’t need to have or do everything at once. Balance requires realizing that “having it all” is better viewed as a longitudinal goal, necessitating adjustments in priorities over time and an acceptance that achieving less than perfection is part of being human and is perfectly all right. The real question then becomes, can we be OK with not having everything at the same time?

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WORKS CITED


Artificial Intelligence Integration in Point-of-Care Ultrasound

BENJAMIN HOENIG AND NIBRAS BUGHRARA, M.D., FASA

Focused transthoracic echocardiography (FTTE) is an abridged echocardiographic exam performed by a non-cardiologist at the bedside to obtain diagnostic quality information in real time that can direct patient management in up to half of all critically ill patients. In recent surveys, program directors (PD) supported incorporating FTTE training into the anesthesia residency curriculum in light of the growing evidence regarding its clinical utility. PD support also reflects the recent increased emphasis on ultrasound training by the Accreditation Council for Graduate Medical Education (ACGME). However, although 65% of U.S. PDs believe FTTE should be a component of anesthesia residency training, only 22% of U.S. anesthesia residency programs provide structured training in FTTE.

Commonly documented barriers to incorporating structured FTTE education into residency training include a lack of both an easily implementable standardized curriculum and ultrasound-trained staff as well as time limitations. Artificial intelligence (AI) in FTTE, specifically deep learning (DL) software capable of automatically classifying data based on complex pattern recognition, has the potential to reduce the faculty and resource burden of standardized ultrasound education and can augment trainee learning experiences with interactive guidance in image acquisition, interpretation, and automatic anatomical labeling.

In addition to enhancing training in a standardized fashion, this software can reduce inter-operator variability with regard to image quality and estimation of cardiac function, therefore expanding the accuracy and diagnostic potential of FTTE.

Recently developed DL software, which was trained using more than five million point-of-care ultrasound (POCUS) study images, demonstrated the ability to provide real-time, step-by-step instructions on how to manipulate an ultrasound probe. Once the images obtained surpass a preset quality threshold, they are automatically captured. This software was able to guide novice ultrasound users in obtaining common FTTE views that were sufficient enough to qualitatively estimate clinically useful parameters such as left ventricular size and...
function. Automating the acquisition and capture of POCUS images has the potential to simplify and standardize image interpretation, which can be useful for residency training and time-sensitive patient care situations such as undifferentiated hypotension or cardiac arrest. Ultrasound learning systems that guide trainees in proper ultrasound probe technique and automatically label relevant anatomy allow for more opportunities for active learning and may reduce the time and supervision required to achieve competency in FTTE. Furthermore, this technology shows great potential for guiding clinical management in resource-limited settings, as it may expand access to ultrasound training to non-traditional operators such as nurses. The first iteration of this technology has been approved by the Food and Drug Administration (FDA) and incorporated into new ultrasound machines.

At Albany Medical Center (AMC), we have implemented a POCUS curriculum and established our own FTTE perioperative service to assist in the evaluation of patients with undifferentiated hypotension. To finish their ultrasound training requirements, residents must obtain 20 supervised FTTE studies on perioperative patients that require

Figure 1: Caption guidance software used to guide novice sonographers in image acquisition. Once the software detects a diagnostic quality image, the machine automatically captures a video clip. Image was collected by N. Bughrara using Caption AI (Caption Health, Brisbane, CA) uploaded on Terason ultrasound (Burlington, MA).
clinical evaluation. A mandatory case review after each study is performed to reinforce concepts learned during the didactic training sessions.

Our institution is no exception to the barriers that other PDs have shared when implementing an ultrasound training program, including a paucity of experts in POCUS and FTTE. In 2020, at the height of the COVID-19 pandemic, we arranged for residents to perform their 20 required FTTE studies using AI-augmented image acquisition guidance software without direct supervision. Only images that met a preset quality threshold were saved to the ultrasound machine, meaning residents were automatically guided in probe placement and made

Figure 2: Auto-calculation via left ventricular outflow tract and stroke volume. This demonstrates the computational capabilities of artificial intelligence for hemodynamic parameters and structural measurements. Image was collected by N. Bughrara using Mindray TE7 ultrasound (Probo Medical, Fishers, IN).
aware if certain windows required repeating. Residents were still required to report and discuss their findings with the attending anesthesiologist, but their mandatory case review could be delayed until a POCUS expert was available. In our experience, the active guidance and repetition provided by the AI-enhanced ultrasound machines served as an acceptable extension of the ultrasound instructors and resulted in a significant reduction in the burden of supervision.

Although we did have some success using AI-enhanced ultrasound machines for training purposes, there has not yet been widespread integration of machine learning software in true clinical settings.\(^3,7\) Currently, AI augmentation of ultrasound is best used for simple calculations or tasks and is not yet suitable for use without human-implemented safeguards.\(^7\) Our experience with the auto calculation of stroke volume (SV) is that it requires constant expert input to be accurate. As AI augmentation in ultrasound continues to grow, experts such as those involved in the Developmental and Exploratory Clinical Investigation of DEcision support systems driven by Artificial Intelligence (DECIDE-AI) committee must create the framework necessary to validate new AI technology for safe clinical use.\(^10\)

To view a clip demonstrating the use of ultrasound AI software in a critical care setting, go to [https://tinyurl.com/bdu54wbe](https://tinyurl.com/bdu54wbe).

Benjamin Hoenig is a fourth-year medical student at Albany Medical College. Nibras Bughrara, M.D., FCCM, FASA, is a staff intensivist, anesthesiologist and director of the Anesthesia Critical Care Division, director of Critical Care Echocardiography, and an associate professor of anesthesia and surgery in the Department of Anesthesiology and Critical Care Medicine at Albany Medical Center.

REFERENCES


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New York State Legislative Session Update

Nurse Anesthetist (CRNA) Scope-of-Practice Bills

The latest legislative session has adjourned. NYSSA President Jason Lok, M.D.; GLAC Chairman Jon Gal, M.D.; the NYSSA leadership; Executive Director Stuart Hayman; Assistant Executive Director Lisa O'Neill; lobbyist Bob Reid; and I are pleased to report that the higher education chairs in both houses elected NOT to include the Cooney/Reyes amended bills (S0769A/A6958A) on their agendas.

Once again, there was intense lobbying by the New York State Association of Nurse Anesthetists (NYSANA) to move this legislation forward, as well as a last-minute amendment by New York state Sen. Toby Ann Stavisky, chair of the Committee on Higher Education, in an apparent attempt to move the legislation out of this committee in the final days of the session. We extend our thanks to Assemblywoman Rodneyse Bichotte Hermelyn for introducing the NYSSA-supported Safe Anesthesia Equal Access bill (A1890) in the 2023-2024 legislative session. Assemblywoman Bichotte Hermelyn has been a strong advocate for preserving safe anesthesia standards for all New York state patients. A special thank you also goes to state Sen. Andrew Gounardes, the new Senate sponsor of the Safe Anesthesia Equal Access bill (S3000). Finally, we are grateful to all of the NYSSA members who traveled to Albany on May 9, 2023, to attend our annual legislative day and lobby their lawmakers to preserve safe anesthesia standards.

With regard to the last-minute effort to move the Cooney/Reyes bills (S0769A/A6958A), on May 15, 2023, this legislation was amended to replace the “collaborative” anesthesia model — which we actively and strongly opposed — with a so-called “under the direction” standard. After our review of this amendment, we determined that the objective remained to create independent practice for nurse anesthetists (in addition to creating confusion in the OR by including a vague and untested definition of the anesthesia standard of care). Sen. Stavisky
and her director of the Committee on Higher Education were actively involved in drafting this amendment, which will carry over to the next legislative session. As such, we can anticipate another strong push by NYSANA and their supporters to advance this legislation next year. I prepared a memo in opposition to the amended bills, with input from Bob Reid and Stuart Hayman. This memo can be found on the NYSSA website (“Advocacy” – “Legislative and Regulatory Issues”). Bob Reid presented our memo to key members of the Legislature.

Other Legislation and Developments of Interest

Executive Order No. 4 Status

Executive Order No. 4 has EXPIRED, effective June 22, 2023. As you may recall, the governor issued Executive Order No. 4 (EO #4) in September 2021 and extended it continuously until June 22, 2023, at which time it was allowed to expire. Executive Order No. 4 contained an exemption that suspended longstanding provisions of the New York state health code that require physician supervision of nurse anesthetists in Article 28 facilities.

EO #4 was originally introduced with the stated intent to address critical workforce shortages in the healthcare industry. Proponents of EO #4 erroneously asserted that by removing physician supervision of nurse anesthetists, access to anesthesia care during the pandemic would improve. Based on our internal surveys, the vast majority of healthcare facilities still maintained physician anesthesiologist supervision of nurse anesthetists. For the most part, preservation of the existing supervision standard of anesthesia care continued; however, the proponents of EO #4 claimed otherwise.

The NYSSA opposed the issuance of EO #4 and advocated for either its repeal or amendment in order to preserve patient safety through physician-led anesthesia care. All patients deserve equal access to the highest standards of anesthesia care regardless of the patient’s insurance status or the location where this care is provided. The reinstatement of the relevant New York state health code provisions guarantees patients equal access across the state.

It is important to note that the governor has, in the past, issued an extension of EO #4 and backdated it. We do not expect that will occur again but will keep you updated.
Out-of-State Physicians and Nurses
At the end of May, legislation was introduced by Assemblywoman Patricia Fahy to grant an extension of authorization for out-of-state physicians and nurses who currently are permitted to practice under the emergency order to continue to practice in New York state pending a determination on licensure (A6697A Fahy/S7492B Stavisky). This bill was signed into law (Chapter 136 of 2023).

Grieving Families Act (Wrongful Death)
This bill was reintroduced (A6698 Weinstein/S6636 Hoylman-Sigal: “An act to amend the estates, powers and trusts law, in relation to the payment and distribution of damages in wrongful death actions”) and passed with extremely broad support in both houses. It awaits the governor’s action. As you may recall, earlier this year the governor vetoed an earlier version of this bill.

Non-Compete Agreements
The New York state Legislature passed a bill on June 30, 2023 (S3100A Ryan/A1278B Joyner), that, if signed into law by the governor, will prohibit almost all new non-compete agreements for employees, including physicians. The law will take effect 30 days after the governor signs it and will apply to contracts entered into or modified after such effective date. The bill does not prohibit employers from including provisions that state that a departing employee may not solicit clients nor disclose trade secrets, confidential or proprietary client information, provided such agreement does not otherwise restrict competition in violation of Section 191-d. The text of the bill may be found on the NYSSA website (“Advocacy” – “Legislative and Regulatory Issues”). As you may recall, the federal government recently took an interest in banning such non-compete agreements nationwide via an FTC regulation. (Please see my recently published Albany Report.) This bill would codify such a ban in state law.

Social Media Campaign
Throughout the legislative session, an effective social media campaign was launched by Bob Reid, Elizabeth Reid, Stuart Hayman, and Lisa ONeill. This consisted of: (i) an editorial by Dr. Jason Lok that was published in the Empire Report (https://empirereportnewyork.com/patient-safety-is-our-first-priority); (ii) the creation of three physician anesthesiologist profiles (Alopi Patel, M.D.; Kara M. Barnett, M.D., FASA;
and Stacey A. Watt, M.D., MBA, FASA, MHPE) that were posted on the safe anesthesia website (these profiles can be found at www.safeanesthesia.com under “Meet a Physician”); and (iii) the placement of timely ads and the advancement of other public relations initiatives.

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