

SOCCA

INTERCHANGE

Society of Critical Care Anesthesiologists Newsletter Volume 30 | Issue 3 | August 2019

PRESIDENT'S MESSAGE

I hope that you are having a great summer.

The contributions from many SOCCA volunteers are helping develop exciting projects with deliverables I believe the membership as a whole will find engaging and valuable. In this issue of the Interchange, I would like to highlight some the current efforts by the Education and Research Committees since they met in May in Montreal.

The Education Committee serves to coordinate all of SOCCA's educational offerings. The charge of this group was expanded beyond development of our Annual Meeting as we are increasingly involved in developing educational content in a variety of settings. In addition to our Annual Meeting, these efforts also include the critical care aligned content at the IARS Annual Meeting, SOCCA sponsored content at the ASA Annual Meeting and critical care content at the SCA Annual Meeting. While we are exploring collaboration with other relevant professional societies, a new initiative promises to offer year round value for our membership.

SOCCA will be conducting a Board Review course the day prior to our annual meeting. This offering will differ from our annual meeting in a variety of ways and differs from other board review courses in several



Daniel R. Brown, MD, PhD, FCCM President Mayo Clinic Rochester, Minnesota ways. Content for this day long meeting will be derived from the ABA Critical Care In-Training Exam Keyword content and prioritized by how recent examinees have performed on these concepts. Presentations will be by junior faculty identified by fellowship directors and in a TED-talk type format. The aim is to provide a venue for more, and younger, members to be involved and to deliver content in a manner increasingly

favored by learners. The presentations will be 10-12 minutes in duration, narrowly focused and grouped by organ system or general theme. Content will be recorded and we are working with IARS to create a library of these presentations that will be accessible to SOCCA membership through our website. In addition to serving as a resource for general subspecialty learning, this would facilitate 'just in time' education for both trainees and SOCCA members. As an example, a 10-12 minute talk on stellate ganglion blocks for adjunctive management of cardiac arrhythmias could cover mechanism of action. recommended agents/volume and discussion around unilateral or bilateral blocks. Over time, this highly pertinent content will grow (more than 30 topics per year) and allow for increased membership engagement. We will communicate more about this exciting effort as the process is further developed between now and next

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Editor's Message



Kevin W. Hatton, MD, FCCM Division Chief, Anesthesiology, Critical Care Medicine University of Kentucky College of Medicine Lexington, Kentucky

It has been my privilege to be Editor of the SOCCA Interchange. It is a daunting task...but worth the work. This work has easily demonstrated to me the power of our Society and its membership. The vast knowledge, experience, and ability to collaborate, frequently with short notice, is exciting, invigorating and a testament to you all. I was fortunate to be able to see it first-hand and to be able to tap into it every few months to build our communication platforms. I hope you each keep doing your excellent work and that you continue to contribute to the SOCCA Interchange. The more you do, the more we all receive.



Before I go, I must apologize to Dr. Alison Dalton at the University of Chicago. I mistakenly assigned authorship of her excellent article, "Does IV acetaminophen affect delirium after cardiac surgery? Thoughts on the DEXACET trial" in the May 2019 Newsletter to someone else. This has been corrected in the online archive of the Interchange.

Although I am rotating off as the SOCCA Interchange Editor, I will continue my involvement with the Society through my recent election to the Board of Directors. If I can ever be of service to any of you, please let me know. I am always available at my email address: kevin.hatton@uky.edu or through my twitter handle: \checkmark @md_hatton. Until we meet again!

PRESIDENT'S MESSAGE continued from the cover

May. While focused on those starting their careers, the topics and content for the review course will be applicable to all anesthesia intensivists and likely to be viewed as complimentary to our traditional Annual Meeting format and content.

Our membership survey also identified that research is viewed as an important aspect of SOCCA. We are attempting to balance this desire with the realities of funding and time. The Research Committee, chaired by Robert Stevens, has several initiatives underway. This committee is responsible for the Annual Meeting abstract program as well as acting as a clearinghouse for any membership surveys requested by outside entities. The group is also helping facilitate original research. Last year's Anesthesia Critical Care fellows were surveyed in an effort to describe post-training professional plans. There is a paucity of information available in this domain and better understanding would seem important to the future of the specialty. This is envisioned as an ongoing effort and will allow us to better describe who we are and what we do. It is likely that this information will also be useful to training programs and to the leadership of SOCCA as we continue to try and meet member needs. To this end, the research group is also working on developing a survey of our membership as a whole with the goal of understanding the roles that critical care anesthesiologists currently play in their healthcare systems.

These are just a few of the activities currently being advanced by SOCCA volunteers. We will use the Interchange, our website and social media (> @ SOCCA_CritCare) to help communicate within our community. We are making great progress in pursuing



the strategic goals as identified by our membership survey. I encourage you to reach out and become involved. Even if your current commitments only allow you to complete a survey or attend our annual meeting, your involvement is important to the future of SOCCA.

I wish you a safe and enjoyable summer. 🏩

COMMITTEE REPORT Education Committee Update

The SOCCA Education Committee has undergone substantial changes in the past year. We have grown to become 12-person strong and we have developed clear directives, focusing on the SOCCA strategic goals. Coordinating a successful annual meeting remains the prime focus of the committee and planning for the next annual meeting (to be held in San Francisco) has already begun under the direction of Peter Von Homeyer MD, FASE, the annual program chair. Stay tuned for additional information as we get closer to May 15, 2020!

We are also excited to launch a new educational program for SOCCA members and fellows in 2020. This program will be a day-long board review course on the Thursday prior to the

annual SOCCA meeting. The goals of the board review course will be to provide an intensive, focused education experience to our fellows as they begin to focus on their board certification



Sheela Pai Cole, MD Education Committee Chair Clinical Associate Professor, Anesthesiology, Perioperative, and Pain Medicine Stanford University Department of Anesthesia Stanford, California examination and, also, to showcase the depth and breadth of our SOCCA members with a focus on developing junior faculty and promoting inclusion and diversity within our specialty. We hope this experience continues to spark enthusiasm for years to come.

Finally, the education committee will also focus on representing SOCCA in various collaborative efforts with other regional, national and international anesthesiology and critical care societies. Importantly, because Maintenance of Certification is an important responsibility for critical care anesthesiologists, the SOCCA Education Committee will also work to provide

material relevant to us in MOCA.

We look forward to serving you and the critical care community throughout this year!





Have you visited SOCCA's Job Board recently? Read members-only job posts—including a position with Montefiore Health System in New York City—at SOCCA's Job Board. If you would like to post a job, please email a short description and/or PDF flyer including location, contact information, and closing date to SOCCA Society Director, Vivian Abalama, CAE, IOM at vabalama@iars.org.

COMMITTEE REPORT Research Committee Update



Robert D. Stevens, MD, FCCM Research Committee Chair

Johns Hopkins University Baltimore, Maryland

The SOCCA Research Committee has embarked on a strategic realignment intended to best serve the members of the Society and of the Anesthesiology Critical Care community, at large. The Research Committee has traditionally worked to aggregate and analyze data on Anesthesiology Critical Care practices and on SOCCA membership. The newly reorganized Research Committee will build on this foundation and have proposed a new vision and developed initial proposals to accomplish that vision.

The Research Committee met in the spring and at the SOCCA Annual Meeting in Montreal. From these meetings, several key ideas emerged from discussion:

- The vision of the Research Committee is to promote opportunities for scientific excellence and innovation in the domain of Anesthesiology Critical Care.
- The Committee would like to define key scientific priorities in the field. It is interested in developing the concept of "Perioperative Intensive Care Medicine" (PICM) as an organizing principle. PICM is the science and delivery of critical care before, during and after surgery. A significant proportion of all critical care falls under the definition of

PICM and providing leadership in PICM emerges as a strategic priority for critical care anesthesiologists and for SOCCA.

- The Committee would like to explore feasibility of a SOCCA Research Network which would focus on multicenter trials and large-scale observational data.
- The Committee is interested in commissioning SOCCA Working Groups which could elaborate clinical practice recommendations or research agendas on specific topics of relevance to PICM.
- The Committee will formalize processes and workflows for several of core functions, including: review of survey requests, peer review of abstracts submitted for the SOCCA Annual Meeting, adjudication of awards and any funding appropriations.
- The Research Committee will reach out within SOCCA to engage all society members who have an interest in working.

Moving forward on these different items will require an organized and concerted effort. The Committee will work closely with the other SOCCA committees. We will need to establish several new working groups tasked with developing solutions for the Committee's objectives. We wish to engage with all members of SOCCA who would like to participate as committee members, officers, and most importantly to contribute new ideas and methods. All those who are interested, feel free to email Dr. Robert Stevens, Research Committee chair, at rstvens@jhmi.edu.

SOCIAL MEDIA HIGHLIGHTS @SOCCA_CritCare #SoMe (Social Media!) Summer Update



Michael Fierro, MD Assistant Professor of Anesthesiology Medical College of Wisconsin Milwaukee, Wisconsin @SOCCA_CritCare Nearly three years ago SOCCA dove into #SoMe with its twitter account >> @SOCCA_CritCare, and since that time has covered 3 SOCCA conferences, 2 ASA meetings, and shared #CriticalCare content with over 800 followers. We had our most engaging twitter exchange yet during May's annual meeting (#SOCCA19) and the aligned meeting days with the International Anesthesia Research Society (IARS) and the Association of University Anesthesiologists (AUA). In fact, on the #SOCCA19 meeting day alone we had over 11,000 Twitter impressions (views of our posts) and 28,800 impressions during the conference week! Through twitter we were able to share content and commentary with members and followers throughout the world (and also within the meeting rooms!). We are grateful for the high level of #SoMe engagement during the meeting, as well as the excellent presentations which generated academic

discussion and insightful commentary! The twitter posts by members, online followers, and our organization served as a platform for information sharing during the meeting and also created a permanent, accessible summary of the highlights of the conference! To easily find all twitter posts related to the conference, simply search the hashtag #SOCCA19 on twitter.

At #SOCCA19, we even had a panel dedicated to #SoMe in medicine, aptly titled "Doctoring and Social Media" which was superbly moderated in pro-con fashion by Sheela Pai Cole (@SheelaPaiCole). Panelist Dr. Vivek Moitra (@vmoitra) took the side "Tweet Critical Care: I Cannot Do Without It" while panelist Dr. Veena Satyapriya (@MdVeena) countered with "I Think It's a Distraction: Several Reasons to Thrive Without It." During the talk, which sparked enthusiastic discussion, the benefits of #SoMe such as the ability to broadly share information, access free medical education (#FOAMed) and connect with peers was balanced against the time burden being active on #SoMe entails and losses of privacy. (This author will not disclose his side of the debate!).

This spring we also launched three additional twitter hashtags (#SOCCATrainees, #SOCCADiversity, and #SOCCAResearch), to coincide with the #SOCCA19 meeting. The topics are meant to emphasize some of the most important pillars of our society. We encourage members to utilize #SOCCATrainees to share the activities of fellows, residents, and students who are aspiring intensivists, #SOCCADiversity to highlight diversity within our society, and #SOCCAResearch as a platform to promote the



academic nature of our organization and to share your research. We invite all members who are involved in publications or presentations to reach out to us with their work, either by direct message on twitter or email, and we will broadcast it from our organizational account. When doing so, please also include a photo, figure, or a sentence about your work. Also, feel free to tag us (by adding @SOCCA_CritCare into your tweet) when discussing any critical care topic, sharing an interesting image or vignette from the ICU (HIPPA compliant of course!), or even simply posting a photo of yourself (especially with other members).

Now, back to tweeting!

SOCCA Annual Meeting Award Winners

At the most recent SOCCA Annual Meeting, it was my privilege to present the SOCCA Distinguished Service Award and the Hilmar Burchardi Award to two well-deserving SOCCA members. Below are transcripts from my presentation of these awards.

Aryeh Shander, MD, FCCM, DISTINGUISHED SERVICE AWARD



Aryeh Shander was the recipient of the 2019 SOCCA Distinguished Service Award. Dr. Shander built a career, department and clinical program working tirelessly for what he believes in. Tracking his collaborations and publications, one charts over 20 years of intense, prolific activity matched to numerous collaborations. His publications inform our

gold standard for postoperative pulmonary complications. He has written extensively about the hazards of transfusion therapies and has discussed all manner of blood products. His work encompasses the essential assessment and synthesis of a practical approach to blood management, including critical contributions to major guidelines. Two major texts in blood management are his own. He is an accomplished lecturer, having been an invited speaker on every continent except Antarctica. In 1997, he was honored by *Time* magazine as a "Hero of Medicine" for his contributions to bloodless surgery.

As a former Chief of Service at Englewood Hospital, Aryeh was instrumental in building one of the eminent blood management programs in the country. He is a champion for Anesthesiologist management of anemia, advocating that it is a disease for which the specialty is uniquely qualified to provide guidance and therapies directed at improving outcomes. Aryeh has a long record of service in many important professional associations, serving as the President of the Society of Critical Care Anesthesiologists for 2014 to 2016. His passion, vision, advocacy, and investigative spirit define great service to his patients, colleagues and the specialty of Critical Care Anesthesiology. We congratulate him for his work and service to our Society, his trainees and to his patients.

Michael F. O'Connor, MD, FCCM, HILMAR BURCHARDI AWARD

Michael O'Connor was the recipient of the 2019 Hilmar Burchardi award, given to a genuine "nice guy" of Anesthesiology Critical Care, recognizing true collaborators. I have known Michael since 1998, when I was an intern, and he has been an exemplary good guy, mentor and role model for me.



From the moment I met Michael, I knew he was

smart and well spoken, but what really stood out was that he cared. He cared about his patients and his colleagues. It was also clear that he cared about me and my early career.

Michael modeled a true collaborative and interdisciplinary spirit. He could forge alliances with providers, services, nurses and staff. He taught me valuable lessons about soft diplomacy to remember that water erodes stone, and "never to go to war over 20 of Lasix." In the years since, we have developed a great friendship. I calibrate my own musings to his. He gave me the greatest gift of any Friendship: he allowed me my own delusions, and allowed me to reflect on them.

How Michael cares for patients and trainees and those around him reflects who he is. He gives his all to his job and his colleagues, tirelessly, and without complaint. No one in my career modeled professional care better. To Michael I say: "Congratulations, and well deserved."



Mark Nunnally, MD, FCCM

New York University Langone Medical Center New York, New York

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2019 ANNUAL MEETING



RESEARCH REPORT Prediction of Patient Deterioration on the General Care Floor and its Implications for Critical Care - A Special Series on Perioperative Patient Safety

Editor's Note: This four-part special series on perioperative patient safety will try to answer several questions related to patient deterioration on the general care floor and its implications for the critical care anesthesiologist and the perioperative physician, both of whom also extend services as rapid response providers on the general care floor. Areas of focus will include the demographic of patient deterioration on the hospital ward, the role of continuous monitoring as a tool to prevent harm, the operations and implementation of an effective continuous monitoring system and methods to allay alarm fatigue, along with the role of a rapid response team and early warning scores that rely on real time patient data to function as effective guardians for our patients on the general care floor.

While anesthesia-related intraoperative mortality is rare, all-cause postoperative mortality, defined as death within the first 30 days of surgery, remains common. Overall, 30-day postoperative morality occurs in approximately 1-2% of all patients—approximately 1,000 times more

frequently than anesthesia-related intraoperative mortality.⁽¹⁻³⁾ While the general care ward or unit is traditionally the site for the care of 'clinically stable' patients, nearly half of all adverse events in hospitalized postoperative patients occur on the general care ward and almost three-quarters of patients who suffer postoperative mortality are never even admitted to an intensive care unit.^{(4)(5,6)} When acute cardiorespiratory compromise events



Ashish K. Khanna MD, FCCP, FCCM^{1,2}

¹Associate Professor, Associate Chief for Research, Department of Anesthesiology, Section on Critical Care Medicine Wake Forest University School of Medicine and Wake Forest Baptist Health Winston-Salem, North Carolina Twitter: @KhannaAshishCCM ² Outcomes Research Consortium, Cleveland, Ohio occur in hospitalized patients on the general care ward, they are almost always associated with poor outcomes. Furthermore, acute respiratory events on inpatient wards have been associated with an in-hospital mortality rate of approximately 40%.⁽⁷⁻⁹⁾ As Critical Care Anethesiologists, we are frequently on the front line of these issues and are faced with an increasing number of rapid response calls and the downstream consequences of all these acute events on the general care floor.

Current ward monitoring protocols, relying predominantly on vital signs that provide limited "snap-shots of time" assessments leave our patients dangerously under monitored.⁽¹⁰⁾ Many overnight ICU admission may be related to the lack of timely intervention in the setting of undetected vital signs pattern changes in these patients. An observational cohort study of non-cardiac surgical patients showed that severe prolonged hypoxemia (SpO2 <90% for an hour or more) was missed approximately 90% of the time by routine vital sign monitoring alone.

⁽¹¹⁾ Nearly all patients after major abdominal cancer surgery had hypoxemia detected by continuous monitoring while their standard vital sign assessments by nurses (linked to an early warning score algorithm) detected a SpO2 <92% in less than 20% of the patients⁽¹²⁾.

The heart-lung apparatus functions in close coordination and it would be unrealistic to separate hypotension from respiratory compromise. Postoperative hypotension (mean arterial pressure <65 mmHg) occurred for at least a continuous 15 minutes in about one fifth of non-cardiac surgery patients, and for at least a continuous 30 minutes (mean arterial pressure <70 mmHg) in another quarter. Similar to desaturation episodes, these hypotension episodes were detected by continuous monitoring less than half of the time using traditional monitoring.⁽¹³⁾

In addition, a conundrum of associated patient and clinical care related factors add to the increasing risk of acute life-threatening events during the postoperative recovery period. A key factor is the use of opioid-based pain medication, either alone or in combination with benzodiazepine-based sedation, or other

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RESEARCH REPORT Perioperative Patient Safety continued from page 8

mood-altering medications that tend to be co-prescribed in many hospitalized patients. The use of opioids and sedatives in combination nearly triples the risk of receiving cardiopulmonary resuscitation as an inpatient compared to use of either opioids or sedatives as singular agents.⁽¹⁴⁾ That a lot of these patients also suffer from undiagnosed obstructive sleep apnea, adds to the associated risk of cardiac events.⁽¹⁵⁾ A closed claims analysis saw that opioid induced respiratory depression, was associated with anoxic brain injury and mortality in a significant number of patients. Most of these events occurred within 2 hours of the last nursing check and, potentially, could have been prevented by better continuous monitoring and education.⁽¹⁶⁾

How do we, then, make the General Care Ward safer for postoperative patient? It may seem a simple answer. Add continuous monitoring of every single patient. Practically, this would mean adding a multi parameter vital sign monitor to every patient room, tethering the patient to this and having a bedside nurse respond to every real and false alarm (which there would be many more false alarms than real ones). This clearly is an undesirable outcome - and one which would never make a difference in patient safety. Therefore, risk stratification scores such as that developed by large observational, internally validated continuous monitoring datasets such as the one generated by the PRODIGY trial, will serve to help allow the bedside healthcare provider triage and reallocate resources and proactive continuous monitoring in those at a higher risk.^(17,18) In this context, the PRODIGY risk score is a novel, easy to use bedside risk scoring system, generated by continuous oximetry and capnography data, derived from background blinded (silenced) monitoring of patients receiving parenteral opioids on the general care floor. One key element of this trial was to generate many thousands of hours of waveform data, that would allow us to perform artificial intelligence-based pattern detection analytics to predict harm for our monitored floor patients. The incorporation of natural language processing to pick up vital information from clinical notes and laboratory and imaging studies will further impower this tool and allow for a safer recovery environment for our patients on the general care floor.

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WELLNESS SERIES Work-Life Balance: Squeezing Water from a Stone

While there is some disagreement about the details, many observers of the medical profession believe that we are sailing into the teeth of an intensivist shortage, especially with an aging population that has a greater expectation for complex care late in life.1 The severity of this shortage is hard to assess, as conclusions have varied widely depending on the methodology used.² Other researchers have suggested that the extent of this potential shortage may be underestimated because the majority of critical care practitioners are not devoted to critical care full-time.³ Geographic factors may also come into play as intensivists often cluster in major urban centers and this may cause relative oversupply in these areas while leading to undersupply elsewhere.

Additionally, as hospitals find themselves under increased financial pressure and operate with tighter profit margins, there is more of an incentive to manage all aspects of medical care based on an analysis of revenues and costs. Indeed, many authors have singled out critical care as a particularly attractive profit center.⁴ In light of this, it is only natural that both hospitals and physician groups (particularly larger groups with an employment-based structure) may choose to operate with increasingly lean staffing models to maximize profits. Unfortunately, just as tight glycemic control can lead to more hypoglycemic episodes, more conservative staffing models may be more likely to lead to periods of understaffing when individuals retire, leave the practice, or go on medical leave. Unfortunately, because anesthesiology and particularly critical care practitioners rarely control their patient load, we are unable

DRK



San Francisco VA Health Care System UC San Francisco San Francisco, California to adjust our work schedule in the same ways that many other physicians, including proceduralists, can. In many cases, the inability to keep up with patient throughput only incurs the wrath of surgeons and hospital administrators rather than acting as a starting point for creative solutions.

Understaffing, not surprisingly, can lead to negative consequences for patient care. For instance, higher patient-to-nurse and patientto-intensivist ratios have been associated with increased mortality.⁵ The most common effect of physician understaffing in critical care, however, is not to increase the amount of work per shift but to increase the number of shifts worked per person. Working an increased number of shifts can lead to burnout, which is a persistent

problem among critical-care practitioners. Factors associated with burnout include increased work hours, greater call burden, and work-home conflict, all of which can be exacerbated by decreased staffing and increased workload.⁶ Burnout can have a number of detrimental effects such as increased medical errors,⁷ increased patient mortality,⁸ decreased job satisfaction,⁹ and intent to leave one's job.¹⁰ More ominously, burnt-out physicians are more likely to abuse alcohol¹¹ and exhibit suicidal ideation.¹² All of these effects can create a downward spiral: understaffing results in worsening staff burnout, which causes decreased productivity and loss of personnel, and the consequent increased workload drives further dissatisfaction. Therefore, it is critical to address staffing deficiencies early, especially as it can take months to recruit, hire, and credential new critical care specialists.

In some cases, increased hiring alone cannot fix matters. It can be difficult to keep up with staff attrition, especially in smaller departments, where there may be less administrative resources, causing more of the work of recruitment and on-boarding to be done by the shrinking roster of physicians. Creative solutions, such as altered schedules, may be necessary to temporize such a situation. For instance, a recent study from the University of Pennsylvania showed that shortening ICU rotations from

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14 to 7 days decreased rates of subjective burnout by 41% in addition to improving measurements of job fulfillment.¹³ Shorter physician rotations must be weighed against the effect of increased patient handoffs, but staggering the rotations of trainees, nurse practitioners, and other team members can mitigate this.

There are other organizational and structural changes that may affect the prevalence of burnout. Increased time spent on electronic health records has been associated with higher burnout rates,¹⁴ whereas reducing the number of mandatory tasks performed as part of the clinical day can lower them.¹⁵ Therefore, eliminating "busy work" and making ICU time more efficient is a worthy goal. Additionally, leaders that solicit input from staff, keep co-workers well informed, and recognize those who perform well have been shown to decrease burnout scores and improve satisfaction.¹⁶ And physicians whose practices confer a greater deal of control over their work environment tend to exhibit lower levels of stress.¹⁷ In other words, while nothing substitutes for adequate staffing, individuals who feel supported and valued by their organization are more able to bear up under pressure.

Unfortunately, when medicine is structured on a business model, there will always be a tug-of-war between hiring more practitioners and producing more revenue per person. When physicians are pushed to the breaking point in the interest of profit margins, poor outcomes are inevitable for both practitioners and their patients, and even in the most proactive organizations, staffing shortages are unavoidable. However, there are many ways for service chiefs and hospital administrators to soften the blow of increased workload and prevent the worst consequences of burnout. As we find out time and time again, supporting staff members can only lead to better results in the long run.

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MEMBER SPOTLIGHT A Brief Conversation with... Vivian Abalama, CAE, IOM

Editor's Note: For the past few years, we've highlighted members and their achievements in this ongoing series. This month, we will highlight Vivian Abalama, CAE, IOM, the SOCCA Society Director from the IARS. Without her, many of the Society's day-to-day functions would not exist and our Physician leadership, committees and others would surely be lost...



Vivian Abalama, CAE, IOM SOCCA Society Director

Q. What was your professional background before coming on board with SOCCA?

A. Prior to working with IARS and SOCCA, I worked for the American Society of Association Executives (ASAE) in the Volunteer Relations Department, where I managed councils and committees that represented ASAE's 44,000

members and 7,400 organizations. I worked with the CEO and association executives from a variety of professional backgrounds. In 2016, I received my Certified Association Executive (CAE) professional certification from ASAE. The CAE credential signifies a committed association professional who has demonstrated the wide range of knowledge essential to manage an association in today's challenging environment. In 2018, I received the US Chamber of Commerce's Institute of Organizational Management (IOM) program professional certification that requires 96 hours of nonprofit management course instruction. In addition, I am also a U.S. Army Veteran.

Q. What attracted you to joining the organization?

A. Over the past 16 years, I worked in mid-sized and larger associations all with over 30,000 members. A small staff association seemed attractive, because it allowed me to work closely with the Board of Directors and to use the various management and leadership skills I have developed.

Q. It seems like you identified some areas for improvement early on. What were they?

A. My organizational priorities first emerged from working with the SOCCA Board of Directors to set strategic goals and objectives, along with reorganizing

and refocusing of the standing committees. Broadly speaking, in association governance, the Board of Directors should, ideally, set the strategic goals and objectives for the organization. The committees, then, become the driving force behind accomplishing the work that needs to be done to meet these goals and objectives.

An additional early priority was a Bylaws review. This was another task that came out of the strategic planning session. Dr. Steve Surgenor lead the effort to review and revise the SOCCA Bylaws to best allow us to achieve the strategic goals and objectives that had been set as well as increase value for our members.

Q. What role do the organization's by-laws play with regard to its routine operations?

A. Bylaws are sometimes called policies and procedures, but that is something of a misconception. Bylaws should legally guide the organization and could, for example, be brought to court if actions are violated. In contrast, procedures and policies tend to monitor the day to day operations without having the force of the law that bylaws carry. With bylaws, rights are established and protected. The specific roles, duties, and responsibilities for the board of directors, executive committee, each member, and others are defined.

Bylaws that are well-written will ensure the organization runs smoothly by providing a solution for any issues, including nominations, elections, and dispute resolution.

Q. On what else have you focused your early efforts?

A. The SOCCA Interchange was an early focus area, because it is the main avenue for communication to our membership. I felt it was important to revitalize the newsletter to an online digital blog format that allowed members access from anywhere on any device.

The driving force behind the content and layout has been Dr. Kevin Hatton. Dr. Hatton became the Editor in 2018, and we worked together to refocus the communications committee and provide a newsletter that would engage SOCCA members and be relevant and educational. Dr. Hatton was also the driving force behind getting the members re-engaged with our twitter handle @SOCCA_CritCare.

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Craig S. Jabaley, MD

Assistant Professor of Anesthesiology Emory University School of Medicine Atlanta, Georgia

LITERATURE SURVEY "Did You See This?"

National Heart, Lung, and Blood Institute PETAL Clinical Trials Network, Moss M, Huang DT, et al. Early Neuromuscular Blockade in the Acute Respiratory Distress Syndrome. N Engl J Med. 2019;380(21):1997-2008.

Adult acute respiratory distress syndrome (ARDS) remains a serious problem, accounting for or complicating close to 10% of all ICU admissions, and with an associated mortality in the 35-45% range. Robust clinical evidence for ventilatory management has helped to create established and accepted guidelines for parameters such as ideal tidal volume of 4-8 cc/kg predicted body weight, optimal PEEP to avoid hypoxemia and de-recruitment while minimizing barotrauma, and this has resulted in improved survival outcomes in patients with ARDS. In addition, there are also recommendations for use or avoidance of ECMO, high frequency oscillatory ventilation, prone positioning and neuromuscular

blockade. However, many of these advanced strategies require specialized personnel, equipment and facilities. Use of neuromuscular blockade requires only medications for paralysis and sedation and may benefit from monitoring to ensure depth of sedation, and as such may be a more feasible early strategy to improving outcomes in ARDS patients.

Use of neuromuscular blockade in ARDS should improve ventilator-patient synchrony and allow for delivery of adequate tidal volumes while reducing the negative impact of abdominal,





C. Patrick Henson, DO Department of Anesthesiology, Division of Anesthesiology Critical Care Vanderbilt University Medical Center Nashville, Tennessee diaphragm and chest wall musculature on inspiratory pressures. Deep sedation, titrated to ensure patients remain asleep during this phase is standard care. As ICU practices have changed in the last decade, we have become increasingly aware of ICU-acquired conditions such as critical care myopathy and delirium. These can cause or worsen post-intensive care unit syndromes, and may have lifelong negative effects on return to health and function. The general consensus is that lighter sedation is preferable in most critically ill patients, and thus, we must reevaluate the routine use of neuromuscular blockade in ARDS.

Previous studies of neuromuscular blockade in ARDS were notable for association of improved mortality (21-day, 28-day and ICU) and PaO2/ FiO2 at 48 hours in the group receiving early neuromuscular blockade, described well in a systematic review by Tao et al. The ACURASYS

trial, previously the largest to date, also demonstrated reduction in complications such as barotrauma and pneumothorax. These findings have been incorporated into the most recent group of ARDS guidelines, and by the Surviving Sepsis Coalition, for patients requiring mechanical ventilation with moderateto-severe ARDS, with the recommendation for an early short course of neuromuscular blockade, for no more than 48 hours. There remains a variable practice pattern with the use of neuromuscular blockade in ARDS, however, perhaps suggesting intensivists are using this strategy when conditions force them to, and not as an earlier-line therapy in moderate-to-severe ARDS.

In late May, we saw the publication of the ROSE trial in ARDS ("Reevaluaton Of Systemic Early Neuromuscular Blockade"). A part of the PETAL network, ROSE rather convincingly demonstrated that there is no benefit to a short course of neuromuscular blockade early in ARDS. There was no difference between the groups in mortality at 90 days, the study's primary endpoint, (42.5 vs 42.8%) and differences in SOFA score, 28-day mortality, ventilator-, ICU- and hospital-free days are also insignificant. The study was stopped for futility after enrollment of 1006 patients, from a planned 1408 patient cohort. There are some signs suggesting inherent difficulties in managing patients requiring high sedation, such as an increased risk of cardiovascular events, or those managed conventionally, such as a higher incidence of barotrauma, but it is unclear how this would have impacted the overall outcomes.

Within the study of neuromuscular blockade in ARDS, we must consider the impact of sedation strategies. ACURASYS, the most notable trial demonstrating benefit with use of neuromuscular

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LITERATURE SURVEY "Did You See This?" continued from page 13

blockade in ARDS, did not adjust sedation strategies between groups, and demonstrated a 9% absolute mortality reduction at 90 days. The approach used in ROSE may make it a bit more difficult to assess the true influence of neuromuscular blockade, as the groups also differed with regard to sedation practices. The intervention group, obviously, received deeper sedation, while the control group had a light sedation strategy. In addition, more intervention patients received deep sedation past the 48-hour trial period, which may imply that use of deep early sedation extends the time course of sedation overall. Regardless, what we can infer from the outcomes of ROSE is that a paradigm of neuromuscular blockade with deep sedation does not improve outcomes over no use of neuromuscular blockade and light sedation strategy.

In addition to differing strategies with regard to sedation, ROSE sought to enroll patients early in their course. While both studies targeted patients with moderate-severe ARDS, the median time from eligibility to inclusions was around 8 hours in ROSE, and around 16 in ACURASYS. This could help account for some differences within the study, including the mortality rates in the treatment groups, if ACURASYS was not able to enroll patients who would not survive the interval period. Nevertheless, ROSE

appears better positioned to truly answer the question of benefit with early neuromuscular blockade.

In summary, a reevaluation of the use of neuromuscular blockade in moderate-severe ARDS is likely warranted, based on these data, and the routine early use of this strategy may be difficult to recommend moving forward. Some patient groups may still have benefit, such as those already requiring deep sedation, those with severe ventilator-patient dyssynchrony, or as a last resort in patients for whom adequate minute ventilation cannot be achieved. This remains to be seen.

Additional resources

Tao W, Yang L-Q, Gao J, Shao J. Neuromuscular blocking agents for adult patients with acute respiratory distress syndrome: A meta-analysis of randomized controlled trials. J Trauma Acute Care. 2018;85(6):1102-1109. doi:10.1097/TA.000000000002057.

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MEMBER SPOTLIGHT Vivian Abalama, CAE, IOM continued from page 12

Q. Can you touch on the importance of membership involvement and steps underway to improve the engagement of society membership?

A. Members want to feel engaged and valued. They want the opportunity to volunteer or ensure that their point of view or voice is being heard by the Society's leadership. In working with SOCCA President Dr. Dan Brown, we conducted the first membership survey to help shape the SOCCA Board of Directors strategic planning conversations moving forward. Members expressed great interest in becoming more involved in SOCCA, and this year SOCCA launched https://socca.org/ get-involved/, where members are able to review the current volunteer opportunities and apply when nominations are open.

We had a great number of members volunteer, and we are working now to get the all the committees reorganized and focused on the goals and objectives set by the Board of Directors. Each committee is tasked with assisting the SOCCA Board of Directors in meeting their strategic goals, which for 2019-2021 are:

Goal 1: Sustain and grow membership

Goal 2: Foster and promote member engagement and contributions

Goal 3: Develop an active research section

Q. What do you see as some other important next steps for SOCCA?

A. For me, I'd like to see SOCCA build on its foundational successes and then:

- Continue to strengthen the governance of SOCCA and ensure that the volunteers and leaders represent the membership as a whole.
- 2. Become the leading organization for critical care anesthesiologists that provides a one stop shop of education, information, and resources for its current and future members.
- **3.** Continue to strengthen and build the SOCCA Annual Meeting into a primary meeting of critical care anesthesiologists from around the world.

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VISIT THE SOCCA WEBSITE at: www.SOCCA.org

MEMBERSHIP

Membership in SOCCA is open to all anesthesiologists who have an interest in critical care medicine; nonanesthesiologistphysicians and scientists who are active in teaching or research relating to critical care medicine; residents and fellows in approved anesthesiology programs; and full-time medical students in an accredited school of medicine.

MEMBERSHIP BENEFITS

Discounted pricing for the SOCCA Annual Meeting, a forum for the specialist with broad-based interests, including respiratory therapy, postoperative cardiac surgical, neurological and transplant management, and trauma care

Discounted membership in the IARS, which includes access to two peer-reviewed journals – Anesthesia & Analgesia and A&A Case Reports, free journal CME, and eligibility to apply for IARS research grants

Free ICU Residents' Guide

Free quarterly newsletter Interchange, which covers ethically controversial issues, survey of practice patterns, and historical aspects of anesthesiology

Renew or join today at www.SOCCA.org/membership.php

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Fellowship Program Reviews

If you would like to contribute a review for a Fellowship Program at your institution in a future issue of the SOCCA Interchange, please contact: Vivian Abalama, CAE, IOM at <u>vabalama@iars.org</u>.

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The opinions presented are those of the authors only, not of SOCCA. Drug dosages, accuracy and completeness of content are not guaranteed by SOCCA.

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